Sound Frequency Archive

Introduction to the Sound Frequency Archive

Welcome to the Sound Frequency Archive, a curated collection of experimental recordin gs where algorithmic music converges with bioresonance frequencies and bioactive sou nd frequencies. Each piece is a fusion of science and art, transforming molecular, geneti c, and energetic signatures into immersive auditory experiences.

Key Categories

- ETDFL (The 2011 Electro Therapy Device Frequency List): Bioresonance Frequency L ist for Rife Machines.

- CALF (The Consolidated Annotated Frequency List): A compilation of empirical freque ncies from many sources, Including Rife, Crane, Hoyland, Dr.Hulda Clark, University So uth Carolina, John Garvey (founder of Son Ridge Health Centers) and others.

- NCFL (The Non-Consolidated Frequency List): The NCFL contains some frequencies and other information not included in the CAFL, including empirical muscle frequencies, mineral and metal frequencies, Hulda Clark's original frequencies converted into audio r ange, frequencies of musical notes.

- SYMBOLIC CHEMISTRY: A sub-library where molecular weights, peptide sequences, and TCM herbal compounds are translated into harmonic frequencies, blending ancient wisdom with algorithmic composition.

This archive serves as both an artistic experiment and an exploratory tool -bridging biology, sound therapy, and generative music. Listen not just with your ears, but with your cells.

Where data becomes resonance, and science becomes song.

* Beware of dehydration using these rmp3's long hours for days on end. Drink fluids every 2-3 hours or listen to rehydration themes under the Symbolic Chemistry section like rehydration, saline solutions, IV drips, etc. to keep water balance. There might be a risk of urolithiasis.

1.1 ETDFL

The ETDFL is a curated list of frequencies used in medical/wellness electrotherapy devi ces (e.g., Rife machines, PEMF). The content is mapped to specific ailments and, often derived from historical bioresonance claims or small-scale studies.

It works with predetermined frequencies (often based on historical bioresonance research or clinical observations). It also can be delivered via transcutaneous electrical stimulation (TENS), pulsed electromagnetic fields (PEMF), or RF/audio signals.

The list serves as a quick reference for device operators needing preset device frequencies, it lacks rigorous annotation (may omit source studies). Good as a quick access to "industry-standard" frequencies (e.g., for a TENS device).

A type of prescriptive list aiming to provide standardized frequencies for clinical/therapeutic devices. Characterized by fixed, practitioner-oriented entries (e.g., "660 Hz for inflammation"). It has minimal context -prioritizes usability over validation and, often proprietary (brand-specific lists for PEMF/Rife machines).

ETDFL and CALF aim for reproducibility; NCFL embraces speculation.

1.1.1 RTS-Detox And Poisons

https://archive.org/details/Resonant_Therapy-Detox_And_Poisons

Adverse Drug Reaction, Arsenic Poisoning, Bites And Stings, Chemtrail Detox, Detox-Liver Kidneys Lymph Intestines Scars, Detox-Toxin Extraction, Food Poisoning, Heavy Metals Detox, Mercury Poisoning, Plant Poisoning, Rabies, Radiation Detox, Sick Building Syndrome, Tetanus,

* Adverse drug reaction, harm associated with the use of given medications at a normal dosage during normal use.

* Sick building syndrome, combination of ailments associated with an individual's place of work (office building) or residence.

1.1.2 RTS-Human Pathogens

https://archive.org/details/Resonant_Therapy-Human_Pathogens

Amebiasis, Aspergillosis, Bacillus Infections, Bacteremia, Bacterial Infections And Mycoses, Bartonella Infections, Botulism, Candidiasis, Cholera, Coccidioidomycosis, Coronaviridae Infections, Cryptococcosis, Cytomegalovirus Infections, Dengue, Ectoparasitic Infestations, Epstein Barr Virus Infections, Fungus Diseases, Gram-Negative Bacterial Infections, Gram-Positive Bacterial Infections, HIV Related Infections, HIV AIDS, Haemophilus Influenzae, Helicobacter Pylori, Herpesviridae Infections, Histoplasmosis, Human Papilloma Virus, Klebsiella Infections, Lice Infestations, Listeria Infections, Lyme Disease, Maduromycosis, Maggot Infestations, Malaria, Mite Infestations, Molds General-Comprehensive, Mycobacterium Infections, Mycoses, Papillomavirus Infections, Parasites General-Comprehensive, Parasites General, Plague, Pneumococcal Infections, Respiratory Syncytial Virus, RNA Virus Infections, Severe Acute Respiratory Syndrome (SARS), Slow Virus Diseases, Smallpox, Staphylococcal Infections, Streptococcal Infections, Syphilis, Tick Paralysis, Tinea, Tuberculosis, Typhoid Fever, Typhus, Viral Hemorrhagic Fevers, Virus-General, Zygomycoses

* Amebiasis, gastrointestinal infection caused by amoebas whose symptoms range from mild diarrhea to dysentery with blood and mucus in the stool.

* Aspergillosis, diseases caused by the fungus aspergillus.

* Bacillus infections, associated to anthrax, pneumonia, septicemia, eye infections, meningitis, food poisoning, endocarditis, bacteraemia, lung infection.

* Bacteremia, the presence of bacteria in the blood stream. The immune response to the bacteria can cause sepsis and septic shock.

* Bacterial infections and mycoses, cause diseases such as cholera, syphilis, leprosy, anthrax, bubonic plague, tuberculosis, tetanus, typhoid fever, diphteria, and cholera. Mouth, nose, ears, throat.

* Bartonella infections, most commonly cat scratch disease, trench fever, and Carri?n’s disease.

* Botulism, a rare but sometimes fatal paralytic illness caused by Clostridium botulinum bacteria.

* Cholera, infection in the small intestine caused by the bacterium Vibrio cholerae. The main symptoms are profuse, watery diarrhea and vomiting.

* Coccidioidomycosis, fungal disease caused by Coccidioides immitis or Coccidioides posadasii.

* Coronaviridae infections, family of enveloped, positive-stranded RNA viruses which may cause a range of illnesses in humans, from the common cold to SARS.

* Cryptococcosis, infection caused by fungi that belong to the genus Cryptococcus.

* Cytomegalovirus infections,can produce life-threatening illnesses in the immature fetus and in immunologically deficient subjects.

* Dengue is transmitted by mosquitoes infected with any one of the four dengue viruses. It may develop into life-threatening dengue hemorrhagic fever, or into dengue shock syndrome.

* Ectoparasitic infestations, parasitic disease caused by organisms that live primarily on the surface of the host.

* Epstein Barr virus infections. Causes infectious mononucleosis (glandular fever). It is also associated with particular forms of cancer, such as Hodgkin's lymphoma, Burkitt's lymphoma, nasopharyngeal carcinoma, and central nervous system lymphomas associated with HIV. Infection with the virus is associated with a higher risk of certain autoimmune diseases, especially dermatomyositis, systemic lupus erythematosus, rheumatoid arthritis, Sj?gren's syndrome, and multiple sclerosis.

* Gram-negative bacterial infections lead to endotoxemia in which the endotoxin (a toxic substance associated with bacterial cell wall or core) comes in contact with bloodstreams and gets mixed with blood. Proteobacteria is one of the major groups of known Gram negative bacteria (it includes bacteria like E. Coli, Salmonella, Pseudomonas, Moraxella, Helicobacter, Stenotrophomonas, Legionella, Acetic Acid Bacteria, etc.). Other groups include Cyanobacteria, Spirochaetes, Green Sulfur and Green Non-Sulfur Bacteria.

* Gram-positive bacterial infections, produced by bacillus anthracis, bacillus cereus, clostridium botulinum, clostridium tetani, clostridium difficile, clostridium perfringens, corynebacterium diptheriae, listeria monocytogenes, staphylococcus aureus, streptococcus agalactiae, streptococcus pyogenes, and streptococcus pneumoniae.

* Haemophilus influenzae, common cause of respiratory tract infections.

* Helicobacter pylori, related to chronic gastritis, gastric ulcers, linked too to duodenal ulcers and stomach cancer.

* Herpesviridae infections, family of DNA viruses that cause diseases in animals, including humans.

* Histoplasmosis, disease caused by the fungus Histoplasma capsulatum.

* HIV, lentivirus (a member of the retrovirus family) that causes acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive.

* Human papilloma virus, cause of common warts of the hands and feet, as well as of lesions of the mucous membranes of the oral, anal, and genital cavities. HPV genital infection is one of the most common sexually transmitted diseases associated to genital warts and cervical cancer.

* Klebsiella, may cause pneumonia, rhinoscleromatis, septicemia, biliary, urinary and lower respiratory tract infections.

* Listeria infections, may cause mild food poisoning in the healthy and severe systemic disease in those immunosuppressed. Listeriosis can produce sepsis, meningitis and encephalitis.

* Lyme disease, infectious disease caused by at least three species of bacteria belonging to the genus Borrelia.* Maduromycosis, diseases caused by a group of fungi.

* Maggot infestations, may cause Myiasis.

* Malaria, a mosquito-borne infectious disease of humans and other animals caused by protists (a type of microorganism) of the genus Plasmodium.

* Mycobacterium, a genus of opportunistic bacteria which can cause abscesses, septic arthritis, osteomyelitis (bone infection). They can also infect the lungs, lymph nodes, gastrointestinal tract, skin, and soft tissues.

* Mycoses, fungal infection.

* Papillomavirus, infection, depending on the type, is either asymptomatic or causes small benign tumors, known as papillomas or warts. Some types, however, carry a risk of becoming cancerous.

* Plague, deadly infectious disease that is caused by the enterobacteria Yersinia pestis.

* Pneumoccal infections, related to S pneumoniae may cause pneumonia, bronchitis, bacterial meningitis, bacteremia, otitis media, sinusitis, septic arthritis, osteomyelitis, peritonitis, endocarditis and others.

* Respiratory syncytial virus, common virus that leads to mild, cold-like symptoms in adults and older healthy children.

* RNA virus infections, an RNA virus is a virus that has RNA (ribonucleic acid) as its genetic material. Notable human diseases caused by RNA viruses include SARS,

influenza, hepatitis C, West Nile fever and polio.

* Severe acute respiratory syndrome (SARS) is a viral respiratory disease in humans which is caused by the SARS coronavirus.

* Slow virus diseases, develop after an extended period of latency, then follows a slow, progressive course spanning months to years, frequently involving the central nervous system and ultimately leading to death.

* Smallpox, an infectious disease unique to humans, caused by either of two virus variants, Variola major and Variola minor.

* Syphilis, a sexually transmitted infection caused by the spirochete bacterium Treponema pallidum subspecies pallidum.

* Tick paralysis, the only tick-borne disease that is not caused by an infectious organism. The illness is caused by a neurotoxin produced in the tick's salivary gland.

* Tinea, fungus of the dermatophytes family cause of Athletes Foot, Jock Itch and Ringworm among other conditions.

* Tuberculosis, a common and in many cases lethal infectious disease caused by various strains of mycobacteria, usually Mycobacterium tuberculosis.

* Typhoid fever, bacterial disease transmitted by the ingestion of food or water contaminated with the feces of an infected person, which contain the bacterium Salmonella enterica enterica, serovar Typhi.

* Typhus, any of several similar diseases caused by Rickettsia bacteria which are spread by fleas or lice.

* Viral hemorrhagic fevers, illnesses that may be caused by four distinct families of RNA viruses: the families Arenaviridae, Filoviridae, Bunyaviridae, and Flaviviridae. VHF is characterized by fever and bleeding disorders and all can progress to high fever, shock and death in many cases.

* Zygomycoses, an infection caused by fungi of the zygomycetes order.

1.1.3 RTS-Mental Healthcare

https://archive.org/details/Resonant_Therapy-Mental_Healthcare

Adiadochokinesis, Agnosia, Alzheimer Disease, Amnesia, Anomia, Anxiety Disorders,

Aphasia, Apraxias, Asperger Syndrome, Attention Disorder with Hyperactivity, Autistic Disorder, Bipolar Disorder, Brain Diseases, Bruxism, Cerebellar Ataxia, Cerebral Palsy, Chorea, Choreoathetosis, Combat Disorders, Communication Disorders, Dementia, Demyelinating Diseases, Depressive Disorder, Dissociative Disorders, Dyslexia Symptoms, Dysthymic Disorder, Erectile Dysfunction, Essential Tremor, Hyperacusis, Hypersomnia Periodic, Hysteria Dissociative, Motor Neuron Disease, Movement Disorder, Multiple Sclerosis, Multiple System Atrophy, Muscle Spasticity, Mutism, Myeloencephalitis, Narcolepsy-Cataplexy Syndrome, Neurogenic Arthropathy, Neurologic Gait Disorders, Neurosis Obsessive-Compulsive, Nonverbal Learning Disorder, Paraphilias, Parkinson, Parkinsonian Disorders, Personality Disorder-Borderline, Phobic Disorders, Post-Traumatic Stress Disorders, Postpartum Depression, Prosopagnosia, Psychotic Disorders, Restless Legs Syndrome, Seasonal Affective Disorder, Seizures, Seizure Disorder, Sexual Dysfunctions-Psychological, Schizophrenia, Sleep Disorders, Somatoform Disorders, Stiff-Person Syndrome, Stuttering, Thalamic Diseases, Tonic-Clonic Seizures, Tourette Syndrome, Trichothiodystrophy, Tricotillomania, Vascular Dementia, Vertigo Aural

* Adiadochokinesis, inability to perform rapid alternating movements.

* Agnosia, inability to recognize the import of sensory impressions.

* Alzheimer disease, most common form of dementia among older people. Dementia is a brain disorder that seriously affects a person's ability to carry out daily activities.

* Anomia, impairment of one's ability to name persons and objects.

* Aphasia, disturbance in formulation and comprehension of language that results from damage to the brain.

* Apraxias, loss of the ability to perform activities that a person is physically able and willing to do.

* Asperger syndrome, autism spectrum disorder (ASD) that is characterized by significant difficulties in social interaction, alongside restricted and repetitive patterns of behavior and interests. It differs from other autism spectrum disorders by its relative preservation of linguistic and cognitive development.

* Attention deficit disorder with hyperactivity, characterized by either significant difficulties of inattention or hyperactivity and impulsiveness or a combination of the two.

* Autistic disorder, characterized by impaired social interaction and communication, and by restricted and repetitive behavior.

* Bipolar disorder, condition in which people go back and forth between periods of a

very good or irritable mood and depression.

* Brain diseases, caused by injury or disease which affects the electrical impulses among nerves.

* Bruxism, excessive grinding of the teeth and/or excessive clenching of the jaw.

* Cerebellar ataxia, loss of movement and coordination, due to damage or degeneration of the cerebellum.

* Cerebral palsy, an abnormality of motor function, the ability to move and control movements.

* Chorea, brief, repetitive, jerky, or dance like uncontrolled movements caused by muscle contractions that occur as symptoms of several different disorders.

* Choreoathetosis, involuntary movements in a combination of chorea (irregular migrating contractions) and athetosis (twisting and writhing.

* Communication disorders, diseases or conditions that partially or totally prevent human communication.

* Dementia, serious loss of global cognitive ability in a previously unimpaired person.

* Demyelinating diseases, characterized by damage to the myelin sheaths that cover the nerves.

* Dissociative disorders, characterized by a disruption in the normal functioning of consciousness, identity, memory, or perception.

* Dyslexia symptoms, difficulty with phonological awareness, phonological decoding, processing speed, orthographic coding, auditory short-term memory, language skills/verbal comprehension, and/or rapid naming.

* Dysthymic Disorder is characterized by chronic depression, but with less severity than a major depression.

* Essential tremor, progressive neurological disorder of which the most recognizable feature is a tremor of the arms or hands that is apparent during voluntary movements such as eating and writing.

* Hyperacusis, over-sensitivity to certain frequency ranges of sound.

* Hypersomnia periodic, characterized by persistent episodic hypersomnia and cognitive or mood changes.

* Hysteria dissociative, neurotic disorder whereby specific internal mental contents (memories, ideas, feelings, perceptions) are lost to conscious awareness and become unavailable to voluntary recall.

* Motor neuron disease, group of progressive neurological disorders that destroy motor neurons.

* Movement disorder, any neurological condition that affects the speed, fluency, quality, and ease of movement.

* Multiple sclerosis, nervous system disease which affects both brain and spinal cord.

* Multiple system atrophy, progressive brain disorder that affects movement and balance and disrupts the function of the autonomic nervous system.

* Muscle spasticity, disorder of the body's motor system in which certain muscles are continuously contracted.

* Mutism, being unable or unwilling to speak as a result of a physical or psychological disorder.

* Myeloencephalitis, inflammation of the spinal cord and brain.

* Narcolepsy-cataplexy syndrome, disorder of overwhelming sleepiness due to deficiency of a brain chemical called hypocretin.

* Neurogenic arthropathy, gradual and usually painless degeneration of a joint, limb or muscle because of a lack of sensation in the injured tissue.

* Neurologic gait disorders, deviations from normal walking.

* Neurosis obsessive compulsive, anxiety disorder characterized by recurrent, unwanted thoughts (obsessions) and/or repetitive behavior compulsions).

* Nonverbal learning disorder, condition characterized by a significant discrepancy between higher verbal skills and lower motor, visuo-spatial, and social skills.

* Personality disorder borderline, a pervasive pattern of instability in interpersonal relationships, self-image and emotions.

* Phobic disorders, persistent, unrealistic, intense anxiety about and fear of certain situations, circumstances, or objects.

* Prosopagnosia, an impairment in the recognition of faces.

* Psychological sexual dysfunctions, any difficulty experienced by an individual or a

couple during any stage of a normal sexual activity.

* Psychotic disorders, severe mental disorders that cause abnormal thinking and perceptions. People with psychoses lose touch with reality. Two of the main symptoms are delusions and hallucinations.

* Restless legs syndrome, neurological disorder characterized by an irresistible urge to move one's body to stop uncomfortable or odd ensations.

* Schizophrenia, mental disorder characterized by a breakdown of thought processes and by poor emotional responsiveness.

* Seasonal affective disorder, winter depression, winter blues, summer depression, summer blues, or seasonal depression,

* Seizure disorder, any condition in which seizures may be a symptom.

* Seizures, changes in behavior that occur after an episode of abnormal electrical activity in the brain.

* Somatoform disorders, group of mental problems characterized by physical complaints that aren't caused by a physical disease or condition.

* Stiff-person syndrome, neurologic disorder characterized by progressive rigidity and stiffness, primarily of the axial musculature, that is superimposed by spasms, resulting in postural deformities.

* Thalamic Diseases. The thalamus relays motor and sensory information to the cortex, it regulates as well consciousness, sleep and alertness.

* Tonic clonic seizures, or Grand Mal, most commonly associated with epilepsy and seizures in general.

* Tourette syndrome, characterized by repetitive, stereotyped, involuntary movements and vocalizations.

* Trichothiodystrophy, disorder that involves production of abnormal, brittle hair. easily broken -lacking sulfur. While mild cases may involve only the hair. More severe cases also cause delayed development, significant intellectual disability, and recurrent infections.

* Tricotillomania, a type of impulse control disorder that involves an irresistible urge to pull out hair.

* Vascular dementia or multi-infarct dementia, is dementia caused by problems in the supply of blood to the brain.

* Vertigo aural, or Meniere's Disease, a disorder of the inner ear that can affect hearing and balance to a varying degree.

1.1.4 RTS-Mental Healthcare2

https://archive.org/details/Resonant_Therapy-Mental_Healthcare_02

Capgras Syndrome, Cyclothymic Disorder, Delusionary Parasitosis, Dystonia, Hallucinations, Huntington Disease, Manic-Depressive Psychosis, Munchausen Syndrome, Neurosis Hypochondriacal, Sexual Libido Boost, Synesthesia

* Capgras syndrome, delusional misidentification of people.

* Cyclothymia also called cyclothymic disorder, is a type of chronic mood disorder widely considered to be a more chronic but milder or subthreshold form of bipolar disorder. Cyclothymia is characterized by numerous mood swings, with periods of hypomanic symptoms that do not meet criteria for a hypomanic episode, alternating with periods of mild or moderate symptoms of depression that do not meet criteria for a major depressive episode.

* Delusionary parasitosis, type of psychosis producing the mistaken belief that one is being infested by parasites, such as in Ekbom's syndrome or Morgellons disease.

* Dystonia, neurological movement disorder, in which sustained muscle contractions cause twisting and repetitive movements or abnormal postures.

* Hallucinations, false or distorted sensory experiences that appear to be real perceptions.

* Huntington's disease, neurodegenerative genetic disorder that affects muscle coordination and leads to cognitive decline and psychiatric problems.

* Manic-depressive psychosis. Mania is the defining feature of bipolar disorder, and can occur with different levels of severity. With milder levels of mania, known as hypomania, individuals appear energetic, excitable, and may be highly productive. As mania worsens, individuals begin to exhibit erratic and impulsive behavior, often making poor decisions due to unrealistic ideas about the future, and sleep very little. At the most severe level, manic individuals can experience distorted or delusional beliefs about the universe known as psychosis. A depressive episode commonly follows an episode of mania. The biological mechanisms responsible for switching from a manic or hypomanic episode to a depressive episode or vice versa remain poorly understood.

* Munchausen syndrome, condition where someone pretends to be ill or induces symptoms of illness in themselves.

* Neurosis hypochondriacal, excessive preoccupancy or worry about having a serious illness.

* Sexula libido boost. There is no widely accepted measure of what is a healthy level for sex desire. Some people want to have sex every day, or more than once a day; others once a year or not at all. However, a person who lacks a desire for sexual activity for some period of time may be experiencing a hypoactive sexual desire disorder or may be asexual.

* Synesthesia, condition in which one type of sensory stimulation creates perception in another sense.

1.1.5 RTS-Animal Transmitted

https://archive.org/details/Resonant_Therapy-Animal_Healthcare

Amphibian Diseases, Animal Diseases, Arthropod Diseases, Avian Influenza, Bird Diseases, Cat Diseases, Cattle Diseases, Distemper, Follicular Mange, Reptile Diseases,

*** Animal Transmitted Diseases

* Amphibian Diseases, Salmonellosis contracted from handling frogs or newts. Parasitic infections from contaminated water or amphibian contact. Fungal or bacterial infections linked to amphibian habitats.

* Animal Diseases, zoonotic infections like rabies, brucellosis, or leptospirosis. Parasitic infestations such as those caused by mites, fleas, or worms. Bacterial or viral conditions linked to animal exposure or bites.

* Arthropod Diseases, arthropods include insects, ticks, mites, and other invertebrates that can act as vectors for various illnesses. Vector-borne diseases like Lyme disease (from ticks), malaria (from mosquitoes), or leishmaniasis (from sandflies). Parasitic infestations such as scabies (caused by mites) or lice. Allergic reactions or dermatitis from bites or stings.

* Avian influenza, caused by viruses adapted to birds.

* Bird Diseases, psittacosis (Parrot Fever) a bacterial infection humans can contract from pet birds like parrots or cockatiels. Histoplasmosis a fungal infection linked to bird droppings, especially from pigeons or starlings. Avian influenza (bird flu) though rare, certain strains can infect humans through close contact with infected birds.

* Cat diseases, human diseases associated with or transmitted by cats, such as toxoplasmosis or cat scratch disease. The recording shares the same set of frequencies as Inoculation Lymphoreticulosis

* Cattle diseases, brucellosis is a bacterial infection humans can contract from unpasteurized dairy or direct contact with infected cattle.
Anthrax, though rare, it can be transmitted from infected livestock. Leptospirosis bacterial disease spread through cattle urine-contaminated water or soil. Q fever caused by Coxiella burnetii, often linked to cattle, sheep, and goats. The recording shares the same frequency set used for Foot and Mouth Disease, and Trench Foot.

* Distemper, is a highly contagious disease caused by a virus similar to the one that causes measles in people.

* Follicular mange, contagious skin disease of domestic and wild animals caused by a sensitivity to an overpopulation of demodex
mites.

* Reptile diseases, salmonellosis linked to reptile handling, or parasitic infections that may be zoonotic in nature.

1.1.6 RTS-Allergies

https://archive.org/details/Resonant_Therapy-Allergies

Allergic Angiitis, Anaphylaxis, Angioedema, Autoimmune Diseases, Chemical Sensitivity, Electrical Sensitivity, Eosinophilia, Hypersensitivity, Hypersensitivity Respiratory, IgA Deficiency, IgE-Mediated Hypersensitivity, Immediate Hypersensitivity, Immune Complex Diseases, Immune System Diseases, Mastocytosis, Multiple Chemical Sensitivity, Photosensitivity Disorders, Respiratory Hypersensitivity, Rubber Allergy, Systemic Lupus Erythematosus, Urticaria

* Allergic Angiitis, inflammation in the blood vessels, leading to a reduced blood supply to organs and tissues, thereby causing a dysfunction of the organs or permanent damage.

* Anaphylaxis, serious allergic reaction.

* Angioedema, rapid swelling (edema) of the dermis, subcutaneous tissue, mucosa and submucosal tissues, often caused by allergy.

* Autoimmune diseases, inappropriate response of the immune system leading to the attack of its owns cells.

* Eosinophilia, abnormally high number of eosinophils in the blood.

* Hypersensitivity respiratory, form of hypersensitivity affecting the respiratory tract.

* IgA deficiency, or immunoglobulin A levels either low or absent increases risk of autoimmune diseases, gastrointestinal diseases, allergic diseases, as well as worsening forms of immunodeficiency.

* IgE-mediated hypersensitivity, production of specific IgE antibodies directed against innocuous and typically widespread antigens.

* Immune complex disorders, abnormal deposition of immune complexes in organs.

* Immune system disorders, overactive/underactive response of the immune system.

* Mastocytosis, caused by the presence of too many mast cells (mastocytes) and CD34+ mast cell precursors in a person's body.

* Rubber allergy, allergic reactions to the proteins present in natural rubber latex.

* Systemic lupus erythematosus, autoimmune disorder that may affect the skin, joints, kidneys, brain, and other organs.

* Urticaria, hives, skin rash frequently caused by allergic reactions.

1.1.7 RTS-Clotting Disorders

https://archive.org/details/Blood-Coagulation_Factor_Deficiencies

Factor I, Factor V, Factor VII, Factor VIII, Factor IX, Factor X, Factor XI, FactorXII,

*** Clotting disorders, conditions that can lead to excessive bleeding or difficulty forming clots.

* I (fibrinogen). Forms clot (fibrin). Congenital afibrinogenemia, Familial renal

amyloidosis.
* V (proaccelerin, labile factor). Co-factor of X with which it forms the prothrombinase complex. Activated protein C resistance.
* VII (stable factor, proconvertin). Activates IX, X congenital proconvertin/factor VII deficiency.
* VIII (Antihemophilic factor A). Co-factor of IX with which it forms the tenase complex. Haemophilia A.
* IX (Antihemophilic factor B or Christmas factor). Activates X: forms tenase complex with factor VIII. Haemophilia B.
* X (Stuart-Prower factor). Activates II: forms prothrombinase complex with factor V. Congenital Factor X deficiency.
* XI (plasma thromboplastin antecedent). Activates IX Haemophilia C.
* XII (Hageman factor). Activates factor XI, VII and prekallikrein. Hereditary angioedema type III.

1.1.8 RTS-Development Disorders

https://archive.org/details/Resonant_Therapy_Sessions-Chromosome_Abnormalities

Chromosome 5p Syndrome, Chromosome 16, Chromosome 17, Chromosome 18, Chromosome 20, Chromosome 22,

*** Genetic syndromes or developmental disorders.

* Human Chromosome 5p deletion syndrome. Cri-du-chat syndrome is caused by a deletion of the end of the short (p) arm of chromosome 5. This chromosomal change is written as 5p-. The signs and symptoms of cri-du-chat syndrome are probably related to the loss of multiple genes in this region. Researchers have not identified all of these genes or determined how their loss leads to the features of the disorder. They have discovered, however, that a larger deletion tends to result in more severe mental retardation and developmental delays in people with cri-du-chat syndrome. Researchers have defined narrow regions of the short arm of chromosome 5 that are associated with particular features of cri-du-chat syndrome. A specific region designated 5p15.3 is associated with a cat-like cry, and a nearby region called 5p15.2 is associated with mental retardation, small head (microcephaly), and distinctive facial features.

* Human Chromosome 16, Trisomy 16, Familial Mediterranean fever (FMF), Crohn's disease, Thalassemia, Autosomal dominant polycystic kidney disease (PKD-1), Autism, Schizophrenia, Obesity?

* Human Chromosome 17, 17Q21.31 Microdeletion Syndrome, Alexander disease, Andersen-Tawil syndrome, Birt-Hogg-Dubé syndrome, Bladder cancer, Breast cancer, Camptomelic dysplasia, Canavan disease, Cerebroretinal microangiopathy with calcifications and cysts, Charcot-Marie-Tooth disease, Charcot-Marie-Tooth disease - type 1, Corticobasal degeneration, Cystinosis, Depression, Ehlers-Danlos syndrome, Ehlers-Danlos syndrome, arthrochalasia type, Ehlers-Danlos syndrome, classical type, Epidermodysplasia verruciformis, Galactosemia, Glycogen storage disease type II (Pompe disease), Hereditary neuropathy with liability to pressure palsies, Howel–Evans syndrome, Li-Fraumeni syndrome, Maturity onset diabetes of the young type 5, Miller-Dieker syndrome, Multiple synostoses syndrome, Neurofibromatosis -type I, Nonsyndromic deafness, Nonsyndromic deafness, autosomal dominant, Nonsyndromic deafness, autosomal recessive, Osteogenesis imperfecta, Osteogenesis Imperfecta - type I, Osteogenesis Imperfecta -type II, Osteogenesis Imperfecta -type III, Osteogenesis Imperfecta -type IV, Proximal symphalangism, Smith-Magenis syndrome, Usher syndrome, Usher syndrome -type I, Very long-chain acyl-coenzyme A dehydrogenase deficiency.

* Human Chromosome 18, Erythropoietic Protoporphyria, Hereditary Hemorrhagic Telangiectasia, Niemann-Pick disease Type C, Porphyria, Selective Mutism, Edwards syndrome (Trisomy 18), Tetrasomy 18p, Monosomy 18p, Pitt Hopkins Syndrome 18q21.

* Human Chromosome 20, Albright's hereditary osteodystrophy, Arterial tortuosity syndrome, Adenosine deaminase deficiency, Alagille syndrome, Celiac disease, Galactosialidosis - CTSA, Maturity onset diabetes of the young type 1, Neuronal ceroid lipofuscinosis, Pantothenate kinase-associated neurodegeneration, Transmissible spongiform encephalopathy (prion diseases), Waardenburg syndrome.

* Human Chromosome 22, Amyotrophic lateral sclerosis, Breast cancer, DiGeorge Syndrome, Desmoplastic small round cell tumor, 22q11.2 deletion syndrome, 22q13 deletion syndrome or Phelan-McDermid syndrome, Li-Fraumeni syndrome, Neurofibromatosis type 2, Rubinstein-Taybi syndrome, Waardenburg syndrome, Cat eye syndrome, Methemoglobinemia, Schizophrenia, Male-pattern baldness? Cat-eye Syndrome, Emanuel Syndrome, Leukemia. Other changes in the number or structure of chromosome 22 can have a variety of effects, including mental retardation, delayed development, physical abnormalities, and other medical problems.

1.1.9 RTS

https://archive.org/details/Resonant_Therapy_Sessions

These recordings are, for the most part, mixed using data from the book created and updated by the ETDFL (Electro Therapy Device Frequency List) Association and available online. Frequency sets in the aforementioned book are calculated by biofeedback means and quoted in thousands. The ETDFL book is not a list of unique

frequency sets. A few other recordings in this page transcribe empirical sets of data from lists available at electroherbalism.com. Download here a list of repeated frequency sets taken from the 2011 Rife Book,

https://archive.org/download/Resonant_Therapy_Sessions_10/2011_Rife_Book-Duplicate_Sets.pdf

Sound waves are just another type of wave. Listen to the mp3's as if you were enjoying the sound of the sea at a beach. Remember, using this type of therapy on others without their consent is not ethically sound.

Alopecia, Amino Acid Metabolism, Analgesia, Arm Injuries, Asphyxia, Avitaminosis, Bald Head Virus, Bone Fractures, Bradycardia, Brain Hypoxia, Burns, Carnitine Diseases, Cartilage Diseases, Chromosome Disorders, Chronic Diseases, Common Cold, Corneal Diseases, Cough, Cutis Laxa, Dental Diseases, Dermatitis, Dermatomycoses, Eating Disorders, Edema, Fatigue, Fatty Acid Oxidation Disorders, Fever, Foot Deformities, Gangrene, Hair Diseases, Heat -Stress Disorders, Hyperglycemia-Symptoms Only, Ichthyosis, Inflammation, Influenza, Joint Diseases, Lactobacillus Acidophilus, Lipodystrophy, Lipomatosis, Macular Degeneration, Menstruation Disturbances, Metabolic Diseases, Metabolic Syndrome X, Migraine Disorders, Muscular Diseases, Neuralgia, Nevus, Nose Diseases, Olfaction Disorders, Pain, Proteinuria, Pruritus, Respiratory Tract Infections, Retinal Diseases, Retinitis Pigmentosa, Sinusitis, Skin Collagen Building, Skin Diseases, Spider Veins, Sweat Gland Diseases, Swelling, Syndrome Disorders, Synovitis, Tendinopathy, Vertigo, Vision Disorders, Vitreous Disorders, Wounds and Injuries

* Alopecia (also Baldness, Pseudopelade). Hair loss, also known as alopecia or baldness, refers to a loss of hair from part of the head or body. Typically at least the head is involved. The severity of hair loss can vary from a small area to the entire body.[6] Inflammation or scarring is not usually present. Hair loss in some people causes psychological distress. Common types include male- or female-pattern hair loss, alopecia areata, and a thinning of hair known as telogen effluvium.] The cause of male-pattern hair loss is a combination of genetics and male hormones; the cause of female pattern hair loss is unclear; the cause of alopecia areata is autoimmune; and the cause of telogen effluvium is typically a physically or psychologically stressful event. Telogen effluvium is very common following pregnancy. Less common causes of hair loss without inflammation or scarring include the pulling out of hair, certain medications including chemotherapy, HIV/AIDS, hypothyroidism, and malnutrition including iron deficiency. Causes of hair loss that occurs with scarring or inflammation include fungal infection, lupus erythematosus, radiation therapy, and sarcoidosis. Pseudopelade of Brocq is a flesh- to pink-colored, irregularly shaped alopecia that may begin in a moth-eaten pattern with eventual coalescence into larger patches of alopecia.

* Amino Acid Metabolism (also Amino Acidopathies, Congl.). Inborn errors of amino acid metabolism are metabolic disorders which impair the synthesis and degradation of amino acids. Types: Alkaptonuria. Aspartylglucosaminuria. Methylmalonic acidemia. Maple syrup urine disease. Homocystinuria. Tyrosinemia. Trimethylaminuria. Hartnup disease. Biotinidase deficiency. Ornithine carbamoyltransferase deficiency. Carbamoyl-phosphate synthase I deficiency disease. Citrullinemia. Hyperargininemia. Hyperhomocysteinemia. Hypermethioninemia. Hyperlysinemias. Nonketotic hyperglycinemia. Propionic acidemia. Hyperprolinemia. Amino acid transport disorders: Cystinuria. Dicarboxylic aminoaciduria. Hartnup disease. Amino acid storage disorders: Glutaric acidemia type 2. Aminoacidopathies are a group of rare and diverse disorders, caused by the deficiency of an enzyme or transporter involved in amino acid metabolism. Inborn errors of amino acid metabolism or aminoacidopathies are a group of rare and diverse disorders, in total affecting about 1 in 1000 humans worldwide. These disorders can be subdivided in organic acidurias, urea cycle defects, transport defects of urea cycle intermediates, and remaining aminoacidopathies.

* Analgesia is the absence of sensibility to pain, particularly the relief of pain without loss of consciousness; absence of pain or noxious stimulation. An analgesic or painkiller is any member of the group of drugs used to achieve analgesia, relief from pain. They are distinct from anesthetics, which temporarily affect, and in some instances eliminate, sensation.

* Arm Injuries. Minor arm injuries are common. Symptoms often develop from everyday wear and tear, overuse, or an injury. Arm injuries are often caused by: Sports or hobbies. Work-related tasks. Work or projects around the home. Older adults have a greater chance for injuries and broken bones because they lose muscle mass and bone strength (osteoporosis) as they age. Older adults also have more problems with vision and balance, which increases their chances of having an accidental injury. Acute injuries come on suddenly and may be caused by a direct blow, a penetrating injury, or a fall or from twisting, jerking, jamming, or bending a limb abnormally. Pain may be sudden and severe. Bruising and swelling may develop soon after the injury. Overuse injuries occur when stress is placed on a joint or other tissue, often by "overdoing" an activity or repeating the same activity.

* Asphyxia or asphyxiation is a condition of deficient supply of oxygen to the body that arises from abnormal breathing. An example of asphyxia is choking. Asphyxia causes generalized hypoxia, which affects primarily the tissues and organs. There are many circumstances that can induce asphyxia, all of which are characterized by an inability of an individual to acquire sufficient oxygen through breathing for an extended period of time. Asphyxia can cause coma or death.

* Avitaminosis (also Vitamin Deficiency). Vitamin deficiency is the condition of a long-term lack of a vitamin. When caused by not enough vitamin intake it is classified as a primary deficiency, whereas when due to an underlying disorder such as malabsorption it is called a secondary deficiency. An underlying disorder may be metabolic – as in a

genetic defect for converting tryptophan to niacin – or from lifestyle choices that increase vitamin needs, such as smoking or drinking alcohol. Thiamine (Vitamine B1) deficiency symptoms of deficiency include weight loss, emotional disturbances, impaired sensory perception, weakness and pain in the limbs, and periods of irregular heart beat. Long-term deficiencies can be life-threatening. Riboflavin (Vitamine B2) deficiency causes painful red tongue with sore throat, chapped and cracked lips, and inflammation at the corners of the mouth (angular cheilitis). Eyes can be itchy, watery, bloodshot and sensitive to light. Riboflavin deficiency also causes anemia with red blood cells that are normal in size and hemoglobin content, but reduced in number. This is distinct from anemia caused by deficiency of folic acid or vitamin B12. Niacin (Vitamine B3) deficiency causes pellagra, a reversible nutritional wasting disease characterized by four classic symptoms often referred to as the four Ds: diarrhea, dermatitis, dementia, and death. Pantothenic acid (Vitamine B5) deficiency is extremely rare. Symptoms include irritability, fatigue, and apathy. Vitamin B6 deficiency signs and symptoms include microcytic anemia, electroencephalographic abnormalities, dermatitis, depression and confusion. Biotin (Vitamin B7) deficiency affects hair growth and skin health. Folate (Vitamin B9) deficiency is common, and associated with numerous health problems, but primarily with neural tube defects (NTDs) in infants when the mother's plasma concentrations were low during the first third of pregnancies. Vitamin B12 deficiency can lead to pernicious anemia, megaloblastic anemia, subacute combined degeneration of spinal cord, and methylmalonic acidemia, among other conditions. Vitamin C deficiency leads to weakness, weight loss and general aches and pains. Longer-term depletion affects connective tissues, severe gum disease, and bleeding from the skin. Vitamin A deficiency can cause nyctalopia (night blindness) and keratomalacia, the latter leading to permanent blindness if not treated. Vitamin D deficiency is a known cause of rickets, and has been linked to numerous other health problems. Vitamin E deficiency causes poor conduction of electrical impulses along nerves due to changes in nerve membrane structure and function. Vitamin K deficiency signs and symptoms can include sensitivity to bruising, bleeding gums, nosebleeds, and heavy menstrual bleeding in women. Vitamin K deficiency bleeding (VKDB) due to physiologically low vitamin K plasma concentrations is a serious risk for premature and term newborn and young infants.

* Bald Head Virus is a virus that causes hair loss.

* Bone Fractures. A bone fracture is a medical condition in which there is a partial or complete break in the continuity of a bone. In more severe cases, the bone may be broken into several pieces. A bone fracture may be the result of high force impact or stress, or a minimal trauma injury as a result of certain medical conditions that weaken the bones, such as osteoporosis, osteopenia, bone cancer, or osteogenesis imperfecta, where the fracture is then properly termed a pathologic fracture. Although bone tissue contains no pain receptors, a bone fracture is painful for several reasons: Breaking in the continuity of the periosteum, with or without similar discontinuity in endosteum, as both contain multiple pain receptors. Edema and hematoma of nearby soft tissues caused by ruptured bone marrow evokes pressure pain. Involuntary muscle spasms trying to hold bone fragments in place. Damage to adjacent structures such as nerves,

muscles or blood vessels, spinal cord, and nerve roots (for spine fractures), or cranial contents (for skull fractures) may cause other specific signs and symptoms. Some fractures may lead to serious complications including a condition known as compartment syndrome. If not treated, eventually, compartment syndrome may require amputation of the affected limb. Other complications may include non-union, where the fractured bone fails to heal or mal-union, where the fractured bone heals in a deformed manner. One form of malunion is the malrotation of a bone, which is especially common after femoral and tibial fractures.

* Bradycardia (also Bradyarrhythmia) is a condition typically defined wherein an individual has a resting heart rate of under 60 beats per minute (BPM) in adults, although some studies use a heart rate of less than 50 BPM. Bradycardia typically does not cause symptoms until the rate drops below 40 bpm. When symptomatic, it may cause fatigue, weakness, dizziness, sweating, and at very low rates, fainting. Highly trained athletes may also have athletic heart syndrome, a very slow resting heart rate that occurs as a sport adaptation and helps prevent tachycardia during training. The term "relative bradycardia" is used to refer to a heart rate that, although not actually below 60 BPM, is still considered too slow for the individual's current medical condition.

* Brain Hypoxia (also Cerebral Anoxia, Encephalopathy Hypoxic, Hypoxia Brain, Anoxia Brain, Anoxic Encephalopathy) erebral hypoxia is a form of hypoxia (reduced supply of oxygen), specifically involving the brain; when the brain is completely deprived of oxygen, it is called cerebral anoxia. There are four categories of cerebral hypoxia; they are, in order of increasing severity: diffuse cerebral hypoxia (DCH), focal cerebral ischemia, cerebral infarction, and global cerebral ischemia. Prolonged hypoxia induces neuronal cell death via apoptosis, resulting in a hypoxic brain injury. Cases of total oxygen deprivation are termed "anoxia", which can be hypoxic in origin (reduced oxygen availability) or ischemic in origin (oxygen deprivation due to a disruption in blood flow). Brain injury as a result of oxygen deprivation either due to hypoxic or anoxic mechanisms are generally termed hypoxic/anoxic injuries (HAI). Hypoxic ischemic encephalopathy (HIE) is a condition that occurs when the entire brain is deprived of an adequate oxygen supply, but the deprivation is not total. While HIE is associated in most cases with oxygen deprivation in the neonate due to birth asphyxia, it can occur in all age groups, and is often a complication of cardiac arrest. The brain requires approximately 3.3 ml of oxygen per 100 g of brain tissue per minute. Initially the body responds to lowered blood oxygen by redirecting blood to the brain and increasing cerebral blood flow. Blood flow may increase up to twice the normal flow but no more. If the increased blood flow is sufficient to supply the brain's oxygen needs then no symptoms will result. However, if blood flow cannot be increased or if doubled blood flow does not correct the problem, symptoms of cerebral hypoxia will begin to appear. Mild symptoms include difficulties with complex learning tasks and reductions in short-term memory. If oxygen deprivation continues, cognitive disturbances, and decreased motor control will result. The skin may also appear bluish (cyanosis) and heart rate increases. Continued oxygen deprivation results in fainting, long-term loss of consciousness, coma, seizures, cessation of brain stem reflexes, and brain death.

* Burns. A burn is a type of injury to skin, or other tissues, caused by heat, cold, electricity, chemicals, friction, or ultraviolet radiation (like sunburn). Most burns are due to heat from hot liquids (called scalding), solids, or fire. While rates are similar for males and females, the underlying causes often differ. Among women in some areas, risk is related to use of open cooking fires or unsafe cook stoves. Among men, risk is related to the work environments. Alcoholism and smoking are other risk factors. Burns can also occur as a result of self-harm or violence between people (assault). Burns that affect only the superficial skin layers are known as superficial or first-degree burns. They appear red without blisters and pain typically lasts around three days. When the injury extends into some of the underlying skin layer, it is a partial-thickness or second-degree burn. Blisters are frequently present and they are often very painful. Healing can require up to eight weeks and scarring may occur. In a full-thickness or third-degree burn, the injury extends to all layers of the skin. Often there is no pain and the burnt area is stiff. Healing typically does not occur on its own. A fourth-degree burn additionally involves injury to deeper tissues, such as muscle, tendons, or bone. The burn is often black and frequently leads to loss of the burned part.

* Carnitine Diseases (also Carnitine Disorders). Distinct deficiencies arise either from genetic mutation of carnitine transporters or in association with other disorders such as liver or kidney disease. Carnitine deficiency occurs in aberrations of carnitine regulation in disorders such as diabetes, sepsis, cardiomyopathy, malnutrition, cirrhosis, endocrine disorders and with aging. Primary carnitine deficiency is a genetic condition that prevents the body from using certain fats for energy, particularly during periods without food (fasting). The nature and severity of signs and symptoms may vary, but they most often appear during infancy or early childhood and can include severe brain dysfunction (encephalopathy), cardiomyopathy, confusion, vomiting, muscle weakness, and hypoglycemia. Some individuals may only have fatigability in adulthood, or no symptoms at all. This condition is caused by mutations in the SLC22A5 gene and is inherited in an autosomal recessive manner.

* Cartilage Diseases (also Chondromalacia) Several diseases can affect cartilage. Chondrodystrophies are a group of diseases, characterized by the disturbance of growth and subsequent ossification of cartilage. Some common diseases that affect the cartilage are listed below. Osteoarthritis: Osteoarthritis is a disease of the whole joint, however, one of the most affected tissues is the articular cartilage. The cartilage covering bones (articular cartilage—a subset of hyaline cartilage) is thinned, eventually completely wearing away, resulting in a "bone against bone" within the joint, leading to reduced motion, and pain. Osteoarthritis affects the joints exposed to high stress and is therefore considered the result of "wear and tear" rather than a true disease. It is treated by arthroplasty, the replacement of the joint by a synthetic joint often made of a stainless steel alloy (cobalt chromoly) and ultra-high-molecular-weight polyethylene (UHMWPE). Chondroitin sulfate or glucosamine sulfate supplements, have been claimed to reduce the symptoms of osteoarthritis, but there is little good evidence to support this claim. Traumatic rupture or detachment: The cartilage in the knee is frequently damaged but can be partially repaired through knee cartilage replacement therapy. Often when athletes talk of damaged "cartilage" in their knee, they are referring

to a damaged meniscus (a fibrocartilage structure) and not the articular cartilage. Achondroplasia: Reduced proliferation of chondrocytes in the epiphyseal plate of long bones during infancy and childhood, resulting in dwarfism. Costochondritis: Inflammation of cartilage in the ribs, causing chest pain. Spinal disc herniation : Asymmetrical compression of an intervertebral disc ruptures the sac-like disc, causing a herniation of its soft content. The hernia often compresses the adjacent nerves and causes back pain. Relapsing polychondritis: a destruction, probably autoimmune, of cartilage, especially of the nose and ears, causing disfiguration. Death occurs by asphyxiation as the larynx loses its rigidity and collapses. Tumors made up of cartilage tissue, either benign or malignant, can occur. They usually appear in bone, rarely in pre-existing cartilage. The benign tumors are called chondroma, the malignant ones chondrosarcoma. Tumors arising from other tissues may also produce a cartilage-like matrix, the best-known being pleomorphic adenoma of the salivary glands. The matrix of cartilage acts as a barrier, preventing the entry of lymphocytes or diffusion of immunoglobulins. This property allows for the transplantation of cartilage from one individual to another without fear of tissue rejection. Chondromalacia patellae (also known as CMP) is an inflammation of the underside of the patella and softening of the cartilage. The cartilage under the kneecap is a natural shock absorber, and overuse, injury, and many other factors can cause increased deterioration and breakdown of the cartilage. The cartilage is no longer smooth and therefore movement and use is very painful. While it often affects young individuals engaged in active sports, it also afflicts older adults who overwork their knees. Chondromalacia patellae is sometimes used synonymously with patellofemoral pain syndrome. However, there is general consensus that patellofemoral pain syndrome applies only to individuals without cartilage damage.This condition is also known as Chondrosis.

* Chromosome Disorders (also Chromosome Abnormality, Autosomal Chromosome). A chromosome abnormality, chromosomal anomaly, chromosomal aberration, chromosomal mutation, or chromosomal disorder, is a missing, extra, or irregular portion of chromosomal DNA. These can occur in the form of numerical abnormalities, where there is an atypical number of chromosomes, or as structural abnormalities, where one or more individual chromosomes are altered. Chromosome mutation was formerly used in a strict sense to mean a change in a chromosomal segment, involving more than one gene. Chromosome anomalies usually occur when there is an error in cell division following meiosis or mitosis. Chromosome abnormalities may be detected or confirmed by comparing an individual's karyotype, or full set of chromosomes, to a typical karyotype for the species via genetic testing. Autosomal genetic disorders can arise due to a number of causes, some of the most common being nondisjunction in parental germ cells or Mendelian inheritance of deleterious alleles from parents. Autosomal genetic disorders which exhibit Mendelian inheritance can be inherited either in an autosomal dominant or recessive fashion. These disorders manifest in and are passed on by either sex with equal frequency. Autosomal dominant disorders are often present in both parent and child, as the child needs to inherit only one copy of the deleterious allele to manifest the disease. Autosomal recessive diseases, however, require two copies of the deleterious allele for the disease to manifest. Because it is possible to possess one copy of a deleterious allele without presenting a disease phenotype, two

phenotypically normal parents can have a child with the disease if both parents are carriers (also known as heterozygotes) for the condition.

* Chronic Diseases (also Chronic Illness) is a human health condition or disease that is persistent or otherwise long-lasting in its effects or a disease that comes with time. The term chronic is often applied when the course of the disease lasts for more than three months. Common chronic diseases include arthritis, asthma, cancer, chronic obstructive pulmonary disease, diabetes, Lyme disease, autoimmune diseases, genetic disorders and some viral diseases such as hepatitis C and acquired immunodeficiency syndrome. It is possible and not unexpected for an illness to change in definition from terminal to chronic. Diabetes and HIV for example were once terminal yet are now considered chronic due to the availability of insulin for diabetics and daily drug treatment for individuals with HIV which allow these individuals to live while managing symptoms. In medicine, a chronic condition can be distinguished from one that is acute. An acute condition typically affects one portion of the body and responds to treatment. A chronic condition on the other hand usually affects multiple areas of the body, is not fully responsive to treatment, and persists for an extended period of time. Chronic conditions may have periods of remission or relapse where the disease temporarily goes away, or subsequently reappears. Periods of remission and relapse are commonly discussed when referring to substance abuse disorders which some consider to fall under the category of chronic condition. Chronic conditions are often associated with non-communicable diseases which are distinguished by their non-infectious causes. Some chronic conditions though, are caused by transmissible infections such as HIV/AIDS.

* Common Cold (also Coryza, Acute) The common cold, also known simply as a cold, is a viral infectious disease of the upper respiratory tract that primarily affects the respiratory mucosa of the nose, throat, sinuses, and larynx. Signs and symptoms may appear less than two days after exposure to the virus. These may include coughing, sore throat, runny nose, sneezing, headache, and fever.People usually recover in seven to ten days, but some symptoms may last up to three weeks. Occasionally, those with other health problems may develop pneumonia. Well over 200 virus strains are implicated in causing the common cold, with rhinoviruses, coronaviruses, adenoviruses and enteroviruses being the most common. They spread through the air during close contact with infected people or indirectly through contact with objects in the environment, followed by transfer to the mouth or nose. Risk factors include going to child care facilities, not sleeping well, and psychological stress. The symptoms are mostly due to the body's immune response to the infection rather than to tissue destruction by the viruses themselves. The symptoms of influenza are similar to those of a cold, although usually more severe and less likely to include a runny nose.

* Corneal Diseases (also Corneal Ulcer) The most common corneal disorders are the following: Corneal abrasion - a medical condition involving the loss of the surface epithelial layer of the eye's cornea as a result of trauma to the surface of the eye. Corneal dystrophy - a condition in which one or more parts of the cornea lose their normal clarity due to a buildup of cloudy material. Corneal ulcer - an inflammatory or infective condition of the cornea involving disruption of its epithelial layer with

involvement of the corneal stroma. Corneal neovascularization - excessive ingrowth of blood vessels from the limbal vascular plexus into the cornea, caused by deprivation of oxygen from the air. Fuchs' dystrophy - cloudy morning vision. Keratitis - inflammation of the cornea. Keratoconus - a degenerative disease, the cornea thins and changes shape to be more like a cone. Corneal Foreign body- one of the most common preventable occupational hazards.

* Cough is a sudden expulsion of air through the large breathing passages that can help clear them of fluids, irritants, foreign particles and microbes. As a protective reflex, coughing can be repetitive with the cough reflex following three phases: an inhalation, a forced exhalation against a closed glottis, and a violent release of air from the lungs following opening of the glottis, usually accompanied by a distinctive sound. Frequent coughing usually indicates the presence of a disease.Most of the time, irregular coughing is caused by a respiratory tract infection but can also be triggered by choking, smoking, air pollution, asthma, gastroesophageal reflux disease, post-nasal drip, chronic bronchitis, lung tumors, heart failure and medications such as angiotensin-converting-enzyme inhibitors (ACE inhibitors). As it is a natural protective reflex, suppressing the cough reflex might have damaging effects, especially if the cough is productive. The complications of coughing can be classified as either acute or chronic. Acute complications include cough syncope (fainting spells due to decreased blood flow to the brain when coughs are prolonged and forceful), insomnia, cough-induced vomiting, subconjunctival hemorrhage or "red eye", coughing defecation and in women with a prolapsed uterus, cough urination. Chronic complications are common and include abdominal or pelvic hernias, fatigue fractures of lower ribs and costochondritis. Chronic or violent coughing can contribute to damage to the pelvic floor and a possible cystocele.

* Cutis Laxa (also Dermatolysis, Dermatomegaly) is a group of rare connective tissue disorders in which the skin becomes inelastic and hangs loosely in folds. It is characterised by skin that is loose, hanging, wrinkled, and lacking in elasticity. The loose skin can be either generalised or localised. Biopsies have shown reduction and degeneration of dermal elastic fibres in the affected areas of skin. The loose skin is often most noticeable on the face, resulting in a prematurely aged appearance. The affected areas of skin may be thickened and dark. In addition, the joints may be loose (hypermobile) because of lax ligaments and tendons. When cutis laxa is severe, it can also affect the internal organs. The lungs, heart (supravalvular pulmonary stenosis), intestines, or arteries may be affected with a variety of severe impairments. In some cases, hernias and outpouching of the bladder can be observed. Patients can also present with whites of the eyes that are blue.

* Dental Diseases (also Dental/Jaw Cavitations, Stomatognathic Diseases) Dental disease means any pain, injury, deformity, physical illness or departure from complete dental health or the proper condition of the human oral cavity or any of its parts. A dental cavitation is a hole in the jawbone, even though “dental” usually refers to the teeth. Dental cavitations are lesions within the jawbone, often due to blood flow blockage. These holes in the bone harbor toxins and bacteria, but they may not cause any

noticeable symptoms. However, these cavitations have been linked to systemic health problems. Stomatognathic Diseases are diseases of the stomatognathic system, comprising the mouth, teeth, jaws, and pharynx.

* Dermatitis (also Contagious Pustular Dermatitis, Erythroderma, Swimmer's Itch) is inflammation of the skin, typically characterized by itchiness, redness and a rash. In cases of short duration, there may be small blisters, while in long-term cases the skin may become thickened. The area of skin involved can vary from small to covering the entire body. Dermatitis includes atopic dermatitis, allergic contact dermatitis, irritant contact dermatitis, seborrhoeic dermatitis and stasis dermatitis. Contagious Pustular Dermatitis also Orf, is an exanthemous disease caused by a parapox virus and occurring primarily in sheep and goats. It is also known as contagious ecthyma, infectious labial dermatitis, ecthyma contagiosum, thistle disease and scabby mouth. Orf virus is zoonotic—it can also infect humans. Erythroderma is an inflammatory skin disease with redness and scaling that affects nearly the entire cutaneous surface. Erythroderma is generalized exfoliative dermatitis, which involves 90% or more of the patient's skin. The most common cause of erythroderma is exacerbation of an underlying skin disease, such as psoriasis, contact dermatitis, seborrheic dermatitis, lichen planus, pityriasis rubra pilaris or a drug reaction, such as the use of topical steroids. Primary erythroderma is less frequent and is usually seen in cases of cutaneous T-cell lymphoma, in particular in S?zary's disease. Swimmer's Itch, cercarial dermatitis or schistosome dermatitis is a short-term allergic immune reaction occurring in the skin of humans that have been infected by water-borne schistosomes, a type of flatworms. It is common in freshwater, brackish and marine habitats worldwide. The main symptom is itchy papules (raised skin) that commonly occur within 2 days of infection. Initially, wheals develop quickly, then turn into maculae in about half an hour. Within 10–12 hours these turn into very itchy papules that reach their worst by the second or third day. The papules disappear in 1–2 weeks but secondary effects from scratching can continue longer. The intense itching, which peaks after 48–72 hours, is associated with pain and swelling of the affected areas. People repeatedly exposed to cercariae develop heavier symptoms with faster onset.

* Dermatomycoses (also Dermatophytoses, Jock Itch, Fungal Skin Diseases, Tinea Pedis, Athlet's Foot). Fungal infection, also known as mycosis, is disease caused by fungi. Different types are traditionally divided according to the part of the body affected; superficial, subcutaneous, and systemic. Superficial fungal infections include common tinea of the skin, such as tinea of the body, groin, hands, feet and beard, and yeast infections such as pityriasis versicolor. Dermatophytosis, also known as ringworm, is a fungal infection of the skin. Typically it results in a red, itchy, scaly, circular rash. Hair loss may occur in the area affected. Symptoms begin four to fourteen days after exposure. Multiple areas can be affected at a given time. Tinea cruris, also known as jock itch, is a common type of contagious, superficial fungal infection of the groin region, which occurs predominantly but not exclusively in men and in hot-humid climates. Typically, over the upper inner thighs, there is an intensely itchy red raised rash with a scaly well-defined curved border. Athlete's foot, known medically as tinea pedis, is a common skin infection of the feet caused by fungus. Signs and symptoms often include

itching, scaling, cracking and redness. In rare cases the skin may blister. Athlete's foot fungus may infect any part of the foot, but most often grows between the toes. The next most common area is the bottom of the foot. The same fungus may also affect the nails or the hands. It is a member of the group of diseases known as tinea. Athlete's foot is caused by a number of different fungi, including species of Trichophyton, Epidermophyton, and Microsporum. The condition is typically acquired by coming into contact with infected skin, or fungus in the environment. Common places where the fungi can survive are around swimming pools and in locker rooms. They may also be spread from other animals.

* Eating Disorders (also Obesity and Eating Disorders), An eating disorder is a mental disorder defined by abnormal eating behaviors that negatively affect a person's physical or mental health. Types of eating disorders include binge eating disorder, where the afflicted eats a large amount in a short period of time; anorexia nervosa, where the person afflicted has an intense fear of gaining weight and restrict food or overexercise to manage this fear; bulimia nervosa, where the afflicted individual eats a lot (binging) then tries to rid themselves of the food (purging); pica, where the afflicted eats non-food items; rumination syndrome, where the afflicted regurgitates undigested or minimally digested food; avoidant/restrictive food intake disorder (ARFID), where people have a reduced or selective food intake due to some psychological reasons; and a group of other specified feeding or eating disorders. Anxiety disorders, depression and substance abuse are common among people with eating disorders. Obesity is a medical condition in which excess body fat has accumulated to an extent that it may have a negative effect on health. Obesity is correlated with various diseases and conditions, particularly cardiovascular diseases, type 2 diabetes, obstructive sleep apnea, certain types of cancer, and osteoarthritis.

* Edema (also Hydrops), fluid retention, dropsy, hydropsy and swelling, is the build-up of fluid in the body's tissue. Most commonly, the legs or arms are affected. Symptoms may include skin which feels tight, the area may feel heavy, and affected joints may be hard to move. Other symptoms depend on the underlying cause. Causes may include venous insufficiency, heart failure, kidney problems, low protein levels, liver problems, deep vein thrombosis, infections, angioedema, certain medications, and lymphedema. It may also occur after prolonged sitting or standing and during menstruation or pregnancy. The condition is more concerning if it starts suddenly, or pain or shortness of breath is present. Hydrops, the excessive accumulation of serous fluid in tissues or cavities of the body, corresponding to any of various conditions, depending on characteristics and anatomic site, including: Most generally: Edema (hydropsy, dropsy). Anasarca, a severe and widespread form of edema. Ascites, fluid buildup in the abdomen. Effusion (medical senses). More specifically: Endolymphatic hydrops, edema in the inner ear, present in M?ni?re's disease. Cochlear hydrops, a variant of Meniere's disease/Endolymphatic Hydrops without vertigo. Hydrops fetalis, edema in a fetus. Corneal hydrops, humoral edema of the eye.

* Fatigue is a feeling of weariness, tiredness, or lack of energy. It may be sudden or gradual in onset. It normally follows prolonged physical or mental activity, and resolves

completely with rest. However, it may be a symptom of a medical condition if it is unresolved, severe, progressive, or occurs without provocation. Physical fatigue is the transient inability of muscles to maintain optimal physical performance, and is made more severe by intense physical exercise. Mental fatigue is a transient decrease in maximal cognitive performance resulting from prolonged periods of cognitive activity. Mental fatigue can manifest as somnolence, lethargy, or directed attention fatigue. Fatigue can usually be alleviated by periods of rest, unlike weakness. Fatigue and 'feelings of fatigue' are sometimes confused. Fatigability describes a susceptibility to fatigue

* Fatty Acid Oxidation Disorders. In biochemistry and metabolism, beta-oxidation is the catabolic process by which fatty acid molecules are broken down in the cytosol in prokaryotes and in the mitochondria in eukaryotes to generate acetyl-CoA, which enters the citric acid cycle, and NADH and FADH2, which are co-enzymes used in the electron transport chain.The term fatty acid oxidation disorder (FAOD) is sometimes used, especially when there is an emphasis on the oxidation of the fatty acid. In addition to the fetal complications, they can also cause complications for the mother during pregnancy. Examples include: Mitochondrial trifunctional protein deficiency (MTPD)is an autosomal recessive fatty acid oxidation disorder that prevents the body from converting certain fats to energy, particularly during periods without food. The genetics of mitochondrial trifunctional protein deficiency is based on mutations in the HADHA and HADHB genes which cause this disorder. Medium-chain acyl-CoA dehydrogenase deficiency (MCAD deficiency or MCADD), is a disorder of fatty acid oxidation that impairs the body's ability to break down medium-chain fatty acids into acetyl-CoA. The disorder is characterized by hypoglycemia and sudden death without timely intervention, most often brought on by periods of fasting or vomiting. ACADM is the gene involved. Long-chain 3-hydroxyacyl-coenzyme A dehydrogenase deficiency LCHADD, is a rare autosomal recessive fatty acid oxidation disorder that prevents the body from converting certain fats into energy. Mutations in the HADHA gene lead to inadequate levels of an enzyme called long-chain 3-hydroxyacyl-coenzyme A (CoA) dehydrogenase, which is part of a protein complex known as mitochondrial trifunctional protein. Long-chain fatty acids from food and body fat cannot be metabolized and processed without sufficient levels of this enzyme. As a result, these fatty acids are not converted to energy, which can lead to characteristic features of this disorder, such as lethargy and hypoglycemia. Long-chain fatty acids or partially metabolized fatty acids may build up in tissues and damage the liver, heart, retina, and muscles, causing more serious complications. Very long-chain acyl-coenzyme A dehydrogenase deficiency VLCADD is a fatty-acid metabolism disorder which prevents the body from converting certain fats to energy, particularly during periods without food. Mutations in the ACADVL gene lead to inadequate levels of an enzyme called very long-chain acyl-coenzyme A (CoA) dehydrogenase. Without this enzyme, long-chain fatty acids from food and fats stored in the body cannot be degraded and processed. As a result, these fatty acids are not converted into energy, which can lead to characteristic signs and symptoms of this disorder, such as lethargy and hypoglycemia. Levels of very long-chain fatty acids or partially degraded fatty acids may build up in tissues and can damage the heart, liver, and muscles, causing more serious complications.

* Fever (also Hyperthermia, Pirexia) is a body temperature that is higher than normal. A normal temperature can vary from person to person, but it is usually around 98.6 ?F (37 ?C). A fever is not a disease. It is usually a sign that your body is trying to fight an illness or infection. Infections cause most fevers. You get a fever because your body is trying to kill the virus or bacteria that caused the infection. Most of those bacteria and viruses do well when your body is at your normal temperature. But if you have a fever, it is harder for them to survive. Fever also activates your body's immune system.

* Foot Deformities (also Hammertoes, Metatarsal Deformity, Morton's Neuroma, Pes Cavus, Talipes Cavus, Cavus Deformity). A foot deformity is a disorder of the foot that can be congenital or acquired. Such deformities can include hammer toe, club foot, flat feet, pes cavus, etc. A hammer toe or contracted toe is a deformity of the muscles and ligaments of the proximal interphalangeal joint of the second, third, fourth, or fifth toe causing it to be bent, resembling a hammer. In the early stage a flexible hammertoe is movable at the joints; a rigid hammertoe joint cannot be moved. Mallet toe and Claw toe are similar conditions. Metatarsal Deformity are alterations or deviations from normal shape or size which result in a disfigurement of the foot. Morton's neuroma is a benign neuroma of an intermetatarsal plantar nerve, most commonly of the second and third intermetatarsal spaces (between the second/third and third/fourth metatarsal heads; the first is of the big toe), which results in the entrapment of the affected nerve. Though the condition is labeled as a neuroma, many sources do not consider it a true tumor, but rather a perineural fibroma (fibrous tissue formation around nerve tissue). Symptoms include pain on weight bearing, frequently after only a short time. Some people describe a feeling akin to having a pebble in the shoe or walking on razor blades. Burning, numbness, and paresthesia may also be experienced. The symptoms progress over time, often beginning as a tingling sensation in the ball of the foot. Pes cavus, also known as high arch, is a human foot type in which the sole of the foot is distinctly hollow when bearing weight. That is, there is a fixed plantar flexion of the foot. A high arch is the opposite of a flat foot and is somewhat less common. Individuals with pes cavus frequently report foot pain, which can lead to a significant limitation in function. The range of complaints reported in the literature include metatarsalgia, pain under the first metatarsal, plantar fasciitis, painful callosities, ankle arthritis, and Achilles tendonitis. There are many other symptoms believed to be related to the cavus foot. These include shoe-fitting problems, lateral ankle instability, lower limb stress fractures, knee pain, iliotibial band friction syndrome, back pain and tripping. Talipes Cavus or Clubfoot is a birth defect where one or both feet are rotated inward and downward. The affected foot and leg may be smaller than the other. Approximately 50% of cases of clubfoot affect both feet. Most of the time, it is not associated with other problems. Without treatment, the foot remains deformed, and people walk on the sides of their feet. This may lead to pain and difficulty walking. Three main types of pes cavus are regularly described in the literature: pes cavovarus, pes calcaneocavus, and ‘pure’ pes cavus. The three types of pes cavus can be distinguished by their aetiology, clinical signs and radiological appearance. A combination of any or all of these elements can also be seen in a ‘combined’ type of pes cavus that may be further categorized as flexible or rigid. Also, types of Pes Cavus is based on the location of APEX of the deformity: Anterior Cavus

(Forefoot Cavus) –Local –Global. Metatarsus cavus. Posterior Cavus. Combined.

* Gangrene is the death of tissues in your body. It happens when a part of your body loses its blood supply. Gangrene can happen on the surface of the body, such as on the skin, or inside the body, in muscles or organs. Causes include: Serious injuries. Problems with blood circulation, such as atherosclerosis and peripheral arterial disease. Diabetes. Skin symptoms may include a blue or black color, pain, numbness, and sores that produce a foul-smelling discharge. If the gangrene is internal, you may run a fever and feel unwell, and the area may be swollen and painful. Gangrene is a serious condition. It needs immediate attention. In severe cases an amputation may be necessary.

* Hair Diseases or Pseudofolliculitis Barbae. Hair diseases are disorders primarily associated with the follicles of the hair. Pseudofolliculitis barbae (PFB) is a persistent irritation caused by shaving. Pseudofolliculitis barbae (PFB) is most common on the face, but it can also happen on other parts of the body where hair is shaved or plucked, especially areas where hair is curly and the skin is sensitive, such as genital shaving (more properly termed pseudofolliculitis pubis or PFP). After a hair has been shaved, it begins to grow back. Curly hair tends to curl into the skin instead of straight out of the follicle, leading to an inflammation reaction. PFB can make the skin look itchy and red, and in some cases, it can even look like pimples. These inflamed papules or pustules can form especially if the area becomes infected. This is especially a problem for some men who have naturally coarse or tightly curling thick hair. Curly hair increases the likelihood of PFB by a factor of 50. If left untreated over time, this can cause keloid scarring in the beard area. Pseudofolliculitis barbae can further be divided into two types of ingrown hairs: transfollicular and extrafollicular. The extrafollicular hair is a hair that has exited the follicle and reentered the skin. The transfollicular hair never exits the follicle, but because of its naturally curly nature curls back into the follicle causing fluid build-up and irritation. Some related conditions are: Razor burn, a less serious condition caused by shaving, characterized by mild to moderate redness and irritation on the surface of the skin. Unlike PFB, it is usually transient and there is no infection involved. Folliculitis barbae also differs from PFB, where folliculitis barbae is caused by viral or bacterial infections, pseudofolliculitis is created by irritation from shaving and ingrown hairs. Pseudofolliculitis nuchae, a related condition, occurs on the back of the neck, often along the posterior hairline, when curved hairs are cut short and allowed to grow back into the skin. Left untreated, this can develop into acne keloidalis nuchae, a condition in which hard, dark keloid-like bumps form on the neck.

* Heat Stress Disorders (also Heat Cramps. Heat Stress Syndromes) is a group of conditions due to overexposure to or overexertion in excess environmental temperature. Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body’s salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion. The symptoms are: Muscle cramps, pain, or spasms in the abdomen, arms, or legs. Heat exhaustion (or "heat prostration" or "heat stress") symptoms can include heavy sweating, rapid breathing and a fast, weak pulse. If the condition progresses to heat

stroke, then hot, dry skin is typical as blood vessels dilate in an attempt to increase heat loss. An inability to cool the body through perspiration may cause dry skin.

* Hyperglycemia-Symptoms Only Hyperglycemia is a condition that has an excessive glucose amount in the blood plasma. This is also called high blood sugar. Hyperglycemia is a serious problem for patients with diabetes. It is developed when the blood has too much sugar in it. There are two types of hyperglycemia that occurs in people that have diabetes. Fasting hyperglycemia is acquired after fasting for about 8 hours. The blood sugar is higher than 90 to 130 mg/dl. After-meal hyperglycemia has a blood sugar level higher than 180 mg/dl. Hyperglycemia Symptoms: Temporary hyperglycemia is asymptomatic and benign. The levels of the blood glucose can rise above the normal level without really having some effects and symptoms. But, chronic hyperglycemia that has levels higher than the normal can have serious complications. The symptoms of hyperglycemia can be associated with acute hyperglycemia and chronic hyperglycemia. Early symptoms of hyperglycemia: Polyphagia- being hungry frequently, pronounced hunger. Polydipsia- being frequently thirsty, excessive thirst. Polyuria- frequently urinating. Headaches. Difficulty in concentrating. Blurred vision. Weak and tired feeling. Weight loss. Blood glucose level is more than 180 mg/dl. Prolonged hyperglycemia symptoms: Vaginal and skin infections. Cuts and sores that are slow healing. Decreased vision. Nerve damage resulting to insensitive feet, loss of hair and erectile dysfunction. Intestinal and stomach problems like chronic constipation or diarrhea. Coma.

* Ichthyosis (also Netherton Syndrome, Xeroderma) is a family of genetic skin disorders characterized by dry, thickened, scaly skin. The more than 20 types of ichthyosis range in severity of symptoms, outward appearance, underlying genetic cause and mode of inheritance. Netherton syndrome is a severe, autosomal recessive form of ichthyosis associated with mutations in the SPINK5 gene. Netherton syndrome is characterized by chronic skin inflammation, universal pruritus (itch), severe dehydration, and stunted growth. Patients with this disorder tend to have a hair shaft defect (trichorrhexis invaginata), also known as "bamboo hair". The disrupted skin barrier function in affected individuals also presents a high susceptibility to infection and allergy, leading to the development of scaly, reddish skin similar to atopic dermatitis. In severe cases, these atopic manifestations persist throughout the individual's life, and consequently post-natal mortality rates are high. In less severe cases, this develops into the milder ichthyosis linearis circumflexa. Xeroderma, xerosis or xerosis cutis, or simply dry skin, is a skin condition characterized by excessively dry skin. Xeroderma occurs most commonly on the scalp, lower legs, arms, hands, the knuckles, the sides of the abdomen, and thighs. Symptoms most associated with xeroderma are scaling (the visible peeling of the outer skin layer), itching, and skin cracking.

* Inflammation is part of the complex biological response of body tissues to harmful stimuli, such as pathogens, damaged cells, or irritants, and is a protective response involving immune cells, blood vessels, and molecular mediators. The function of inflammation is to eliminate the initial cause of cell injury, clear out necrotic cells and tissues damaged from the original insult and the inflammatory process, and initiate

tissue repair. The five cardinal signs are heat, pain, redness, swelling, and loss of function. Inflammation is a generic response, and therefore it is considered as a mechanism of innate immunity, as compared to adaptive immunity, which is specific for each pathogen.

* Influenza (also Grippe, Human Influenza) commonly known as "the flu", is an infectious disease caused by influenza viruses. Symptoms range from mild to severe and often include fever, runny nose, sore throat, muscle pain, headache, coughing, and fatigue. These symptoms typically begin 1–2 days and less typically 3-4 days after exposure to the virus and last for about 2–8 days. Diarrhea and vomiting can occur, particularly in children. Influenza may progress to pneumonia, which can be caused by the virus or by a subsequent bacterial infection. Other complications of infection include acute respiratory distress syndrome, meningitis, encephalitis, and worsening of pre-existing health problems such as asthma and cardiovascular disease.

* Joint Diseases or Sacroiliac Joint Dysfunction. An arthropathy is a disease of a joint. Joint pain is a common but non-specific sign of joint disease. Signs will depend on the specific disease, and may even then vary. Common signs may include: Decreased range of motion, stiffness, effusion, pneumarthrosis -air in a joint (which is also a common normal finding), bone erosion, systemic signs of arthritis such as fatigue. Sacroiliac joint dysfunction generally refers to pain in the sacroiliac joint region that is caused by abnormal motion in the sacroiliac joint, either too much motion or too little motion. Common symptoms include lower back pain, buttocks pain, sciatic leg pain, groin pain, hip pain (for explanation of leg, groin, and hip pain, see referred pain), urinary frequency, and "transient numbness, prickling, or tingling. Pain can range from dull aching to sharp and stabbing and increases with physical activity. Symptoms also worsen with prolonged or sustained positions (i.e., sitting, standing, lying). Bending forward, stair climbing, hill climbing, and rising from a seated position can also provoke pain. Pain is reported to increase during menstruation in women. People with severe and disabling sacroiliac joint dysfunction can suffer from insomnia and depression. Sacral torsion that is untreated over a long period of time can cause severe Achilles tendinosis.

* Lactobacillus Acidophilusis a species of Gram-positive bacteria in the genus Lactobacillus. L. acidophilus is found in the human and animal gastrointestinal tract and mouth.L. acidophilus was found to lower serum cholesterol and raise cholesterol in fecal matter when fed to pigs. L. acidophilus is also correlated with antagonistic actions upon growth for Staphylococcus aureus, Escherichia coli, Salmonella typhimurium, and Clostridium perfringens. L. acidophilus is found to also reduce oral plaque formation by Streptococcus mutans. Lactobacillus acidophilus is part of the vaginal microbiota along with other species in the genus including Lactobacillus crispatus, Lactobacillus gasseri, Lactobacillus jensenii, and Lactobacillus iners. Lactobacillus acidophilus, like many probiotic supplements, have many claims made of health benefits when consumed, generally by improving or restoring the gut flora.

* Lipodystrophy syndromes are a group of genetic or acquired disorders in which the

body is unable to produce and maintain healthy fat tissue. The medical condition is characterized by abnormal or degenerative conditions of the body's adipose tissue. A more specific term, lipoatrophy, is used when describing the loss of fat from one area (usually the face). This condition is also characterized by a lack of circulating leptin which may lead to osteosclerosis. The absence of fat tissue is associated with insulin resistance, hypertriglyceridemia, non-alcoholic fatty liver disease (NAFLD) and metabolic syndrome. Lipodystrophy can be divided into two broad categories: Congenital lipodystrophy syndromes and Acquired lipodystrophy syndromes. Congenital lipodystrophy (due to inherited genetic defect) is estimated to be extremely rare, possibly affecting only one per million persons. Acquired lipodystophy is much more common, especially affecting persons with HIV infection. Due to an insufficient capacity of subcutaneous adipose tissue to store fat, fat is deposited in non-adipose tissue (lipotoxicity), leading to insulin resistance. Patients display hypertriglyceridemia, severe fatty liver disease and little or no adipose tissue. Average patient lifespan is approximately 30 years before death, with liver failure being the usual cause of death. In contrast to the high levels seen in non-alcoholic fatty liver disease associated with obesity, leptin levels are very low in lipodystropy. Lipodystrophy can be a possible side effect of antiretroviral drugs. Other lipodystrophies manifest as lipid redistribution, with excess, or lack of, fat in various regions of the body. These include, but are not limited to, having sunken cheeks and/or "humps" on the back or back of the neck (also referred to as buffalo hump) which also exhibits due to excess cortisol. Lipoatrophy is most commonly seen in patients treated with thymidine analogue nucleoside reverse transcriptase inhibitors like zidovudine (AZT) and stavudine (d4T).

* Lipomatosis (also Pleomorphic Lipoma, Fatty Tumor, Hibernoma) is believed to be an autosomal dominant condition in which multiple lipomas are present on the body. Many discrete, encapsulated lipomas form on the trunk and extremities, with relatively few on the head and shoulders. Although this condition is benign, it can sometimes be very painful depending on location of the lipomas. Pleomorphic lipomas, like spindle-cell lipomas, occur for the most part on the backs and necks of elderly men, and are characterized by floret giant cells with overlapping nuclei. A lipoma or Fatty Tumor is a benign tumor made of fat tissue. They are generally soft to the touch, movable, and painless. They usually occur just under the skin, but occasionally may be deeper. Most are less than 5 cm (2.0 in) in size. Common locations include upper back, shoulders, and abdomen. It is possible to have a number of lipomas. The cause is generally unclear. Risk factors include family history, obesity, and lack of exercise. A hibernoma is a benign neoplasm of vestigial brown fat. Patients present with a slow-growing, painless, solitary mass, usually of the subcutaneous tissues. It is much less frequently noted in the intramuscular tissue. It is not uncommon for symptoms to be present for years. Benign neoplasm with brown fat is noted.

* Macular Degeneration (also Age-Related Maculopathy, Stargardt Disease, Best Disease) is a medical condition which may result in blurred or no vision in the center of the visual field. Early on there are often no symptoms. Over time, however, some people experience a gradual worsening of vision that may affect one or both eyes. While it does not result in complete blindness, loss of central vision can make it hard to

recognize faces, drive, read, or perform other activities of daily life. Visual hallucinations may also occur but these do not represent a mental illness. Macular degeneration typically occurs in older people. Genetic factors and smoking also play a role. Early or intermediate AMD may be asymptomatic, or it may present with blurred or decreased vision in one or both eyes. This may manifest initially as difficulty with reading or driving (especially in poorly lit areas). Other symptoms of AMD include distortion of vision and blind spots (especially in and around the central visual field). Stargardt disease is the most common inherited single-gene retinal disease. It usually has an autosomal recessive inheritance caused by mutations in the ABCA4 gene. Rarely it has an autosomal dominant inheritance due to defects with ELOVL4 or PROM1 genes. It is characterised by macular degeneration that begins in childhood, adolescence or adulthood, resulting in progressive loss of vision. Presentation usually occurs in childhood or adolescence, though there is no upper age limit for presentation and late onset is possible. The main symptom is loss of visual acuity, uncorrectable with glasses. This manifests as the lack of the ability to see fine details when reading or viewing distant objects. Symptoms typically develop before age 20 and include: wavy vision, blind spots, blurriness, loss of depth perception, sensitivity to glare, impaired colour vision, and difficulty adapting to dim lighting (delayed dark adaptation). Best disease or Vitelliform macular dystrophy, is an irregular autosomal dominant eye disorder which can cause progressive vision loss. This disorder affects the retina, specifically cells in a small area near the center of the retina called the macula. The macula is responsible for sharp central vision, which is needed for detailed tasks such as reading, driving, and recognizing faces. The condition is characterized by yellow (or orange), slightly elevated, round structures similar to the yolk (Latin vitellus) of an egg. Mutations in the RDS and VMD2 genes cause vitelliform macular dystrophy. Mutations in the VMD2 gene are responsible for Best disease. Changes in either the VMD2 or RDS gene can cause the adult-onset form of vitelliform macular dystrophy; however, fewer than a quarter of cases result from mutations in these two genes. In most cases, the cause of the adult-onset form is unknown.

* Menstruation Disturbances (also Menstruation Disorders, Menstruation Retrograde, Polymenorrhea, Hypomenorrhea). A menstrual disorder is characterized as any abnormal condition with regards to a person's menstrual cycle. There are many different types of menstrual disorders that vary with signs and symptoms, including pain during menstruation, heavy bleeding, or absence of menstruation. During retrograde menstruation, blood flows through the Fallopian tubes and out into the peritoneum rather than through the cervix and out the vagina. Women with retrograde menstruation often do not have any symptoms. The primary symptom associated with retrograde menstruation is pain during menstruation(dysmenorrhea). Polymenorrhea is a term used to describe a menstrual cycle that is shorter than 21 days. A normal menstrual cycle is between 24 and 38 days long. Hypomenorrhea or hypomenorrhoea, also known as short or scanty periods, is extremely light menstrual blood flow. It is the opposite of heavy periods or hypermenorrhea which is more properly called menorrhagia.

* Metabolic Diseases or Thesaurismosis. Metabolism is the process your body uses to get or make energy from the food you eat. Food is made up of proteins, carbohydrates,

and fats. Chemicals in your digestive system break the food parts down into sugars and acids, your body's fuel. Your body can use this fuel right away, or it can store the energy in your body tissues, such as your liver, muscles, and body fat. A metabolic disorder occurs when abnormal chemical reactions in your body disrupt this process. When this happens, you might have too much of some substances or too little of other ones that you need to stay healthy. There are different groups of disorders. Some affect the breakdown of amino acids, carbohydrates, or lipids. Another group, mitochondrial diseases, affects the parts of the cells that produce the energy. You can develop a metabolic disorder when some organs, such as your liver or pancreas, become diseased or do not function normally. Diabetes is an example.

* Metabolic Syndrome X or Reaven Syndrome X was first described in 1988 by Gerald Reaven, who proposed the existence of a new syndrome characterized by insulin resistance, hyperinsulinemia, hyperglycemia, dyslipidemia, and arterial hypertension.

* Migraine Disorders (also Migraine Pain, Status Migrainosus, Migraine Headache). A migraine is a primary headache disorder characterized by recurrent headaches that are moderate to severe. Typically, episodes affect one side of the head, are pulsating in nature, and last from a few hours to three days. Associated symptoms may include nausea, vomiting, and sensitivity to light, sound, or smell. The pain is generally made worse by physical activity, although regular exercise may have prophylactic effects. Up to one-third of people affected have aura: typically a short period of visual disturbance that signals that the headache will soon occur. Occasionally, aura can occur with little or no headache following, but not everyone has this symptom. Migraine is believed to be due to a mixture of environmental and genetic factors. About two-thirds of cases run in families. The underlying mechanisms are not fully known. They are, however, believed to involve the nerves and blood vessels of the brain. Globally, approximately 15% of people are affected by migraine. Migraine typically presents with self-limited, recurrent severe headache associated with autonomic symptoms. About 15–30% of people living with migraine experience episodes with aura, and they also frequently experience episodes without aura. The severity of the pain, duration of the headache, and frequency of attacks are variable. A migraine lasting longer than 72 hours is termed status migrainosus. There are four possible phases to a migraine, although not all the phases are necessarily experienced: The prodrome, which occurs hours or days before the headache. The aura, which immediately precedes the headache. The pain phase, also known as headache phase. The postdrome, the effects experienced following the end of a migraine attack. Migraine is associated with major depression, bipolar disorder, anxiety disorders, and obsessive compulsive disorder. These psychiatric disorders are approximately 2–5 times more common in people without aura, and 3–10 times more common in people with aura. Sometimes, aura occurs without a subsequent headache. This is known in modern classification as a typical aura without headache or commonly as a silent migraine.

* Muscular Diseases are any of the diseases and disorders that affect the human muscle system. Diseases and disorders that result from direct abnormalities of the muscles are called primary muscle diseases; those that can be traced as symptoms or

manifestations of disorders of the nervous system or other systems are not properly classified as primary muscle diseases. Because muscles and nerves (neurons) supplying muscle operate as a functional unit, disease of both systems results in muscular atrophy (wasting) and paralysis. Muscular atrophy and weakness are among the most common indications of muscle disease. Though the degree of weakness is not necessarily proportional to the amount of wasting, it usually is so if there is specific involvement of nerve or muscle. Only when all causes have been considered can weakness be attributed to failure of the contractile machinery (i.e., the anatomy) of the muscle cell. The effect of weakness in a particular muscle group depends on the normal functional role of the muscle and the degree to which force fails to develop. A weakness in muscles that are near the ends of the limbs usually results in a tendency to drop things if the upper limb is affected or in “foot drop” if the lower limbs are affected. The overall disability is not as great as weakness of more proximal (closer to the body) muscles controlling the pelvic or shoulder girdles, which hold large components of the total body mass against the force of gravity. Weakness of the proximal muscles that control the shoulder blade (scapula), for example, results in “winging” (i.e., when the sharp inner border protrudes backward) as the arms are held outstretched. If the weakness is severe, the arms cannot be raised at all. Pain may be present in muscle disease because of defects in blood circulation, injury, or inflammation of the muscle. Muscle disease may be detected by assessing whether the muscle groups can withhold or overcome the efforts of the physician to pull or push or by observing the individual carrying out isolated voluntary movements against gravity or more complex and integrated activities, such as walking.

* Neuralgia (also Nerve Pain, Neurodynia, Paroxysmal Nerve Pain) is pain in the distribution of a nerve or nerves, as in intercostal neuralgia, trigeminal neuralgia, and glossopharyngeal neuralgia. Under the general heading of neuralgia are trigeminal neuralgia (TN), atypical trigeminal neuralgia (ATN), occipital neuralgia, glossopharyngeal neuralgia and postherpetic neuralgia (caused by shingles or herpes). The term neuralgia is also used to refer to pain associated with sciatica and brachial plexopathy. Atypical trigeminal neuralgia (ATN) is a rare form of neuralgia and may also be the most misdiagnosed form. Vascular compression of the trigeminal nerve, infections of the teeth or sinuses, physical trauma, or past viral infections are possible causes of ATN, In the case of trigeminal neuralgia, the affected nerves are responsible for sensing touch, temperature sensation and pressure sensation in the facial area from the jaw to the forehead. In the atypical form of TN, the pain presents as severe constant aching along the nerve. Simple stimuli—such as eating, talking, making facial expressions, washing the face, or any light touch or sensation—can trigger an attack (even the sensation of a cool breeze). Attacks may be lone occurrences, clusters of attacks, or constant episodes. Some patients experience muscle spasm. Glossopharyngeal neuralgia consists of recurring attacks of severe pain in the back of the throat, the area near the tonsils, the back of the tongue, and part of the ear. The pain is due to malfunction of the glossopharyngeal nerve (CN IX), which moves the muscles of the throat and carries information from the throat, tonsils, and tongue to the brain. Glossopharyngeal neuralgia, a rare disorder, usually begins after age 40 and occurs more often in men. Often, its cause is unknown. However, glossopharyngeal

neuralgia sometimes results from an abnormally positioned artery that compresses the glossopharyngeal nerve near where it exits the brain stem. Rarely, the cause is a tumor in the brain or neck. Occipital neuralgia, also known as C2 neuralgia, or Arnold's neuralgia, is a medical condition characterized by chronic pain in the upper neck, back of the head and behind the eyes.

* Nevus (plural nevi) is a nonspecific medical term for a visible, circumscribed, chronic lesion of the skin or mucosa. A nevus can be either congenital (present at birth) or acquired. Common terms, including mole, birthmark, and beauty mark, are used to describe nevi, but these terms do not distinguish specific types of nevi from one another. The term nevus is applied to a number of conditions caused by neoplasias and hyperplasias of melanocytes, as well as a number of pigmentation disorders, both hypermelanotic (containing increased melanin, the pigment responsible for skin color) and hypomelanotic (containing decreased melanin). Skin lesions which are multi-colored or polychromatic may be a finding in skin cancer. Increased melanin-Usually acquired type: Melanocytic nevi can be categorized based on the location of melanocytic cells, Junctional/epidermis; Intradermal/dermis; Compound/epidermis and dermis. Atypical (dysplastic) nevus, this type of nevus must be diagnosed based on histological features. Clinically, atypical nevi are characterized by variable pigmentation and irregular borders. Becker's nevus. Blue nevus (rarely congenital): A classic blue nevus is usually smaller than 1 cm, flat, and blue-black in color. Hori's nevus. Nevus spilus (speckled lentiginous nevus): This lesion includes dark speckles within a tan-brown background. Pigmented spindle cell nevus. Spitz nevus. Zosteriform lentiginous nevus. Increased melanin-Usually congenital type: Congenital melanocytic nevus, these nevi are often categorized based on size, however, the lesions usually grow in proportion to the body over time, so the category may change over an individual's life. This categorization is important because large congenital melanocytic nevi are associated with an increased risk of melanoma, a serious type of skin cancer. Small: <1.5 cm. Medium: 1.5–19.9 cm. Large: ≥ 20 cm. Nevus of Ito. Nevus of Ota. Decreased melanin-Acquired: Nevus anemicus. Decreased melanin-Congenital: Nevus depigmentosus. Additional types of nevi do not involve disorders of pigmentation or melanocytes. These additional nevi represent hamartomatous proliferations of the epithelium, connective tissue, and vascular malformations. Epidermal nevi: These nevi represent excess growth of specific cells types found in the skin, including those that make up oil and sweat glands, Verrucous epidermal nevus, Nevus sebaceous, Nevus comedonicus, Eccrine nevus, Apocrine nevus. Connective tissue nevi: Connective tissue nevi represent abnormalities of collagen in the dermis, the deep layer of the skin. Collagenoma, Elastoma. Vascular nevi: These nevi represent excess growth of blood vessels, including capillaries. Nevus simplex (nevus flammeus nuchae), also known as a stork bite or salmon patch. Intramucosal nevi: An intramucosal nevus is a nevus within the mucosa as found in for example the mouth and genital areas. In the mouth, they are found most frequently on the hard palate. They are typically light brown and dome-shaped. Intramucosal nevi account for 64% of all reported case of oral nevi. Hypermelanotic nevi must be differentiated from other types of pigmented skin lesions, Lentigo simplex, Solar lentigo, Caf? au lait macule, Ink-spot lentigo, Mucosal melanotic macule, Mongolian spot (dermal melanocytosis).

* Nose Diseases or Nasal Diseases. One of the most common medical conditions involving the nose is a nosebleed (epistaxis). Another common condition is nasal congestion, usually a symptom of infection, particularly sinusitis, or other inflammation of the nasal lining called rhinitis, including allergic rhinitis and nonallergic rhinitis. Chronic nasal obstruction resulting in breathing through the mouth can greatly impair or prevent the nostrils from flaMost conditions of nasal congestion also cause a loss of the sense of smell (anosmia).ring. One of the causes of snoring is nasal obstruction. Nasal flaring, is usually seen in children when breathing is difficult. In children the nose is a common site of foreign bodies. The nose is one of the exposed areas that is susceptible to frostbite. Because of the special nature of the blood supply to the human nose and surrounding area, it is possible for retrograde infections from the nasal area to spread to the brain. For this reason, the area from the corners of the mouth to the bridge of the nose, including the nose and maxilla, is known as the danger triangle of the face. Infections or other conditions that may result in destruction of, or damage to a part of the nose include rhinophyma, skin cancers particularly basal-cell carcinoma, paranasal sinus and nasal cavity cancer, granulomatosis with polyangiitis, syphilis, leprosy, recreational use of cocaine, chromium and other toxins. The nose may be stimulated to grow in acromegaly, a condition caused by an excess of growth hormone. A common anatomic variant is an air-filled cavity within a concha known as a concha bullosa. In rare cases a polyp can form inside a bullosa. Usually a concha bullosa is small and without symptoms but when large can cause obstruction to sinus drainage. Some drugs can be nasally administered, including drug delivery to the brain, and these include nasal sprays and topical treatments. The septal cartilage can be destroyed through the repeated inhalation of recreational drugs such as cocaine. This, in turn, can lead to more widespread collapse of the nasal skeleton. Sneezing can transmit infections carried in the expelled droplets. This route is called either airborne transmission or aerosol transmission.

* Olfaction Disorders (also Paraosmia or Parosmia, Smell Disorders, Anosmia). Taste and smell disorders are common in adults and may be attributable to a number of causes, including metabolic and endocrine abnormalities, neurologic disorders, inflammatory conditions of the nasal passages and paranasal sinuses, head trauma and surgery, infections, chemical exposures, medications, and even normal aging. Impaired taste and olfaction can negatively impact flavor perception, decreasing the quality of life and interfering with adequate nutritional intake. Parosmia is a dysfunctional smell detection characterized by the inability of the brain to correctly identify an odor's "natural" smell. Instead, the natural odor is usually transformed into an unpleasant aroma, typically a "burned", "rotting", "fecal", or "chemical" smell. There can also be rare instances of a pleasant odor called euosmia. Anosmia, also known as smell blindness, is the loss of the ability to detect one or more smells. Anosmia may be temporary or permanent. It differs from hyposmia, which is a decreased sensitivity to some or all smells. Anosmia can be due to a number of factors, including an inflammation of the nasal mucosa, blockage of nasal passages or a destruction of one temporal lobe. Inflammation is due to chronic mucosa changes in the lining of the paranasal sinus and in the middle and superior turbinates. Phantosmia is the sensation of an odor that isn’t

there.

* Pain (also Physical Suffering) is a distressing feeling often caused by intense or damaging stimuli. The International Association for the Study of Pain defines pain as "an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage." In medical diagnosis, pain is regarded as a symptom of an underlying condition. Pain motivates the individual to withdraw from damaging situations, to protect a damaged body part while it heals, and to avoid similar experiences in the future. Most pain resolves once the noxious stimulus is removed and the body has healed, but it may persist despite removal of the stimulus and apparent healing of the body. Sometimes pain arises in the absence of any detectable stimulus, damage or disease. Pain is usually transitory, lasting only until the noxious stimulus is removed or the underlying damage or pathology has healed, but some painful conditions, such as rheumatoid arthritis, peripheral neuropathy, cancer and idiopathic pain, may persist for years. Pain that lasts a long time is called "chronic" or "persistent", and pain that resolves quickly is called "acute".

* Proteinuria is the presence of excess proteins in the urine. In healthy persons, urine contains very little protein; an excess is suggestive of illness. Excess protein in the urine often causes the urine to become foamy (although this symptom may also be caused by other conditions). Severe proteinurina can cause nephrotic syndrome in which there is worsening swelling of the body. Proteinuria often doesn't cause any symptoms and it may be discovered incidentally. Foamy urine is considered a cardinal sign of proteinuria, but only a third of people with foamy urine have proteinuria as the underlying cause. It may also be caused by bilirubin in the urine (bilirubinuria), retrograde ejaculation, pneumaturia (air bubbles in the urine) due to a fistula, or drugs such as pyridium. Albuminuria, a pathological condition wherein the protein albumin is abnormally present in the urine is a type of proteinuria.

* Pruritus or Itching. Itch is a sensation that causes the desire or reflex to scratch. Itch has resisted many attempts to be classified as any one type of sensory experience. Itch has many similarities to pain, and while both are unpleasant sensory experiences, their behavioral response patterns are different. Pain creates a withdrawal reflex, whereas itch leads to a scratch reflex. Itch generates stimulus of a foreign object underneath or upon the skin and also the urge to remove it. For example, responding to a local itch sensation is an effective way to remove insects from one's skin.

* Respiratory Tract Infections (also Respiratory Tract Disease, Upper Respiratory Tract Infections). Respiratory tract infections (RTIs) are infectious diseases involving the respiratory tract. An infection of this type usually is further classified as an upper respiratory tract infection (URI or URTI) or a lower respiratory tract infection (LRI or LRTI). Lower respiratory infections, such as pneumonia, tend to be far more severe than upper respiratory infections, such as the common cold. The upper respiratory tract is considered the airway above the glottis or vocal cords; sometimes, it is taken as the tract above the cricoid cartilage. This part of the tract includes the nose, sinuses, pharynx, and larynx. Typical infections of the upper respiratory tract include tonsillitis,

pharyngitis, laryngitis, sinusitis, otitis media, certain influenza types, and the common cold. Symptoms of URIs can include cough, sore throat, runny nose, nasal congestion, headache, low-grade fever, facial pressure, and sneezing. In uncomplicated colds, coughing and nasal discharge may persist for 14 days or more even after other symptoms have resolved. Acute URTIs include rhinitis, pharyngitis/tonsillitis, and laryngitis often referred to as a common cold, and their complications: sinusitis, ear infection, and sometimes bronchitis (though bronchi are generally classified as part of the lower respiratory tract.) Symptoms of URTIs commonly include cough, sore throat, runny nose, nasal congestion, headache, low-grade fever, facial pressure, and sneezing. Symptoms of rhinovirus in children usually begin 1–3 days after exposure. The illness usually lasts 7–10 more days. Color or consistency changes in mucous discharge to yellow, thick, or green are the natural course of viral URTI and not an indication for antibiotics. Group A beta-hemolytic streptococcal pharyngitis/tonsillitis (strep throat) typically presents with a sudden onset of sore throat, pain with swallowing, and fever. Strep throat does not usually cause runny nose, voice changes, or cough. Pain and pressure of the ear caused by a middle-ear infection (otitis media) and the reddening of the eye caused by viral conjunctivitis are often associated with URTIs. Small round red lesions may occur on the soft palate.

* Retinal Diseases (also Retinal Vein Occlusion, Retinal Vein Thrombosis). There are many inherited and acquired diseases or disorders that may affect the retina. Some of them include: Retinitis pigmentosa is a group of genetic diseases that affect the retina and cause the loss of night vision and peripheral vision. Macular degeneration describes a group of diseases characterized by loss of central vision because of death or impairment of the cells in the macula. Cone-rod dystrophy (CORD) describes a number of diseases where vision loss is caused by deterioration of the cones and/or rods in the retina. In retinal separation, the retina detaches from the back of the eyeball. Ignipuncture is an outdated treatment method. The term retinal detachment is used to describe a separation of the neurosensory retina from the retinal pigment epithelium. There are several modern treatment methods for fixing a retinal detachment: pneumatic retinopexy, scleral buckle, cryotherapy, laser photocoagulation and pars plana vitrectomy. Both hypertension and diabetes mellitus can cause damage to the tiny blood vessels that supply the retina, leading to hypertensive retinopathy and diabetic retinopathy. Retinoblastoma is a cancer of the retina. Retinal diseases in dogs include retinal dysplasia, progressive retinal atrophy, and sudden acquired retinal degeneration. Lipemia retinalis is a white appearance of the retina, and can occur by lipid deposition in lipoprotein lipase deficiency. Retinal Detachment. The neural retina occasionally detaches from the pigment epithelium. In some instances, the cause of such detachment is injury to the eyeball that allows fluid or blood to collect between the neural retina and the pigment epithelium. Detachment is occasionally caused by contracture of fine collagenous fibrils in the vitreous humor, which pull areas of the retina toward the interior of the globe. Night Blindness : Night blindness occurs in any person with severe vitamin A deficiency. The reason for this is that without vitamin A, the amounts of retinal and rhodopsin that can be formed are severely depressed. Central retinal vein occlusion, also CRVO, is when the central retinal vein becomes occluded, usually through thrombosis. The central retinal vein is the venous equivalent of the

central retinal artery and both may become occluded. Since the central retinal artery and vein are the sole source of blood supply and drainage for the retina, such occlusion can lead to severe damage to the retina and blindness, due to ischemia (restriction in blood supply) and edema (swelling). CRVO can cause ocular ischemic syndrome. Nonischemic CRVO is the milder form of the disease. It may progress to the more severe ischemic type. CRVO can also cause glaucoma.

* Retinitis Pigmentosa (also Rod-Cone Dystrophy, Tapetoretinal Degeneration) Retinitis pigmentosa (RP) is a genetic disorder of the eyes that causes loss of vision. Symptoms include trouble seeing at night and decreased peripheral vision (side vision). As peripheral vision worsens, people may experience "tunnel vision". Complete blindness is uncommon. Onset of symptoms is generally gradual and often in childhood. Retinitis pigmentosa is generally inherited from a person's parents. The most common symptoms of cone dystrophy are vision loss (age of onset ranging from the late teens to the sixties), sensitivity to bright lights, and poor color vision. Therefore, patients see better at dusk. Visual acuity usually deteriorates gradually, but it can deteriorate rapidly to 20/200; later, in more severe cases, it drops to "counting fingers" vision. Dystrophy of the light-sensing cells of the eye may also occur in the rods as well, or in both the cones and the rods. A type of rod-cone dystrophy—where rod function decline is typically earlier or more pronounced than cone dystrophy—has been identified as a relatively common characteristic of Bardet–Biedl Syndrome.Tapetoretinal degenerations are due to partial or complete destruction of a normally developed retina, not as a result of exogenous inflammatory or traumatic influences but due to endogenous influences which cause premature degeneration of the tissue.

* Sinusitis is inflammation of the mucous membranes that line the sinuses resulting in symptoms that may include thick nasal mucus, a plugged nose, and facial pain. Other signs and symptoms may include fever, headaches, a poor sense of smell, sore throat, and a cough. It is defined as acute sinusitis if it lasts less than 4 weeks, and as chronic sinusitis if it lasts for more than 12 weeks. Sinusitis can be caused by infection, allergies, air pollution, or structural problems in the nose. Most cases are caused by a viral infection. Recurrent episodes are more likely in persons with asthma, cystic fibrosis, and poor immune function. The four paired paranasal sinuses are the frontal, ethmoidal, maxillary, and sphenoidal sinuses. The ethmoidal sinuses are further subdivided into anterior and posterior ethmoid sinuses, the division of which is defined as the basal lamella of the middle nasal concha. Complications are thought to be rare (1 case per 10000). The proximity of the brain to the sinuses makes the most dangerous complication of sinusitis, particularly involving the frontal and sphenoid sinuses, infection of the brain by the invasion of anaerobic bacteria through the bones or blood vessels. Abscesses, meningitis, and other life-threatening conditions may result. In extreme cases, the patient may experience mild personality changes, headache, altered consciousness, visual problems, seizures, coma, and possibly death.

* Skin Collagen Building. Collagen is a protein that is an important part of connective tissues in the body. It is a rigid, non-soluble and fibrous protein that adds up to one third of the proteins found in the human body. The collagen tissues support the formation of

bones, tendons, and cartilage that form depending on the level of mineralization. However, an individual can lose collagen components in the body due to exposure to ultraviolet light, tobacco, excessive intake of sugar, and aging. This loss of collagen can cause the skin to lose elasticity, reduction of the thickness of the epidermis, increase in the formation of wrinkles and sagging, and also make the skin vulnerable and easily damaged.

* Skin Diseases (also Neutrophilic Dermatosis, Skin and Connective Tissue Diseases, Bacterial Skin Diseases, Infectious Skin Diseases, Sweet Syndrome, Dermatoses) is any medical condition that affects the integumentary system—the organ system that encloses the body and includes skin, hair, nails, and related muscle and glands. The major function of this system is as a barrier against the external environment. Conditions of the human integumentary system constitute a broad spectrum of diseases, also known as dermatoses. A skin infection is an infection of the skin in humans and other animals, that can also affect the associated soft tissues such as loose connective tissue and mucous membranes. They comprise a category of infections termed skin and skin structure infections (SSSIs), or skin and soft tissue infections (SSTIs), and acute bacterial SSSIs (ABSSSIs). They are distinguished from dermatitis (inflammation of the skin). although skin infections can result in skin inflammation. Skin and skin structure infections (SSSIs), also referred to as skin and soft tissue infections (SSTIs)] or acute bacterial skin and skin structure infections (ABSSSIs), are infections of skin and associated soft tissues (such as loose connective tissue and mucous membranes). A connective tissue disease is any disease that has the connective tissues of the body as a target of pathology. Connective tissue is any type of biological tissue with an extensive extracellular matrix that supports, binds together, and protects organs. Sweet syndrome (SS), or acute febrile neutrophilic dermatosis, is a skin disease characterized by the sudden onset of fever, an elevated white blood cell count, and tender, red, well-demarcated papules and plaques that show dense infiltrates by neutrophil granulocytes on histologic examination. Signs and symptoms are: Acute, tender, erythematous plaques, nodes, pseudovesicles and, occasionally, blisters with an annular or arciform pattern occur on the head, neck, legs, and arms, particularly the back of the hands and fingers. The trunk is rarely involved. Fever (50%); arthralgia or arthritis (62%); eye involvement, most frequently conjunctivitis or iridocyclitis (38%); and oral aphthae (13%) are associated features.

* Spider Veins or Telangectasis are small dilated blood vessels that can occur near the surface of the skin or mucous membranes, measuring between 0.5 and 1 millimeter in diameter. These dilated blood vessels can develop anywhere on the body but are commonly seen on the face around the nose, cheeks and chin. Dilated blood vessels can also develop on the legs, although when they occur on the legs, they often have underlying venous reflux or "hidden varicose veins". When found on the legs, they are found specifically on the upper thigh, below the knee joint and around the ankles. Some telangiectasias are due to developmental abnormalities that can closely mimic the behaviour of benign vascular neoplasms. They may be composed of abnormal aggregations of arterioles, capillaries or venules.

* Sweat Gland Diseases or Miliaria. Some diseases of the sweat glands include: Fox-Fordyce disease, the apocrine sweat glands become inflamed, causing a persistent, itchy rash, usually in the axillae and pubic areas. Frey's Syndrome, if the auriculotemporal nerve is damaged (most often as a result of a Parotidectomy), excess sweat can be produced in the rear of the cheek area (just below the ear) in response to stimuli that cause salivation. Heatstroke, when the eccrine glands become exhausted and unable to secrete sweat. Heatstroke can lead to fatal hyperpyrexia (extreme rise in body temperature). Hidradenitis suppurativa, occurs when the skin and sweat glands become inflamed with swollen lumps. These are typically painful and break open, releasing fluid or pus. The most commonly affected areas are the underarms, under the breasts, and the groin. Hyperhidrosis, (also known as polyhidrosis or sudorrhea) is a pathological, excessive sweating that can be either generalized or localized (focal hyperhidrosis); focal hyperhidrosis occurs most often on the palms, soles, face, scalp and axillae. Hyperhidrosis is usually brought on by emotional or thermal stress, but it can also occur or with little to no stimulus. Local (or asymmetrical) hyperhidrosis is said to be caused by problems in the sympathetic nervous system: either lesions or nerve inflammation. Hyperhidrosis can also be caused by trench foot or encephalitis. Milaria rubra, also called prickly heat. Milaria rubra is the rupture of sweat glands and migration of sweat to other tissues. In hot environments, the skin's horny layer can expand due to sweat retention, blocking the ducts of eccrine sweat glands. The glands, still stimulated by high temperatures, continues to secrete. Sweat builds up in the duct, causing enough pressure to rupture the duct where it meets the epidermis. Sweat also escapes the duct to adjacent tissues (a process called milaria). Hypohydrosis then follows milaria (postmiliarial hypohydrosis). Osmidrosis, often called bromhidrosis, especially in combination with hyperhidrosis. Osmohidrosis is excessive odor from apocrine sweat glands (which are overactive in the axillae). Osmidrosis is thought to be caused by changes in the apocrine gland structure rather than changes in the bacteria that acts on sweat.

* Swelling or Edema is the build-up of fluid in the body's tissue. Most commonly, the legs or arms are affected. Symptoms may include skin which feels tight, the area may feel heavy, and affected joints may be hard to move. Other symptoms depend on the underlying cause. Causes may include venous insufficiency, heart failure, kidney problems, low protein levels, liver problems, deep vein thrombosis, infections, angioedema, certain medications, and lymphedema. It may also occur after prolonged sitting or standing and during menstruation or pregnancy. The condition is more concerning if it starts suddenly, or pain or shortness of breath is present.

* Syndrome Disorders plays the top five most used healing frequencies to fight signs and symptoms that characterise or suggest a disease into normal or regular functions.

* Synovitis is the medical term for inflammation of the synovial membrane. This membrane lines joints that possess cavities, known as synovial joints. The condition is usually painful, particularly when the joint is moved. The joint usually swells due to synovial fluid collection. Synovitis may occur in association with arthritis as well as lupus, gout, and other conditions. Synovitis is more commonly found in rheumatoid

arthritis than in other forms of arthritis, and can thus serve as a distinguishing factor, although it is also present in many joints affected with osteoarthritis. Long term occurrence of synovitis can result in degeneration of the joint. Synovitis causes joint tenderness or pain, swelling and hard lumps, called nodules. When associated with rheumatoid arthritis, swelling is a better indicator than tenderness.

* Tendinopathy (also Tendinitis. Tendonitis) is a type of tendon disorder that results in pain, swelling, and impaired function. The pain is typically worse with movement. It most commonly occurs around the shoulder (rotator cuff tendinitis, biceps tendinitis), elbow (tennis elbow, golfer's elbow), wrist, hip, knee (jumper's knee, popliteus tendinopathy), or ankle (Achilles tendinitis).
Causes may include an injury or repetitive activities. Groups at risk include people who do manual labor, musicians, and athletes. Less common causes include infection, arthritis, gout, thyroid disease, and diabetes. Symptoms includes tenderness on palpation, swelling, and pain, often when exercising or with a specific movement.

* Vertigo or Lightheadedness is a condition where a person has the sensation of movement or of surrounding objects moving when they are not. Often it feels like a spinning or swaying movement. This may be associated with nausea, vomiting, sweating, or difficulties walking. It is typically worse when the head is moved. Vertigo is the most common type of dizziness. The most common disorders that result in vertigo are benign paroxysmal positional vertigo, M?ni?re's disease, and labyrinthitis. Less common causes include stroke, brain tumors, brain injury, multiple sclerosis, migraines, trauma, and uneven pressures between the middle ears. Physiologic vertigo may occur following being exposed to motion for a prolonged period such as when on a ship or simply following spinning with the eyes closed. Vertigo that is caused by problems with the inner ear or vestibular system, which is composed of the semicircular canals, the vestibule (utricle and saccule), and the vestibular nerve is called "peripheral", "otologic", or "vestibular" vertigo. Vertigo that arises from injury to the balance centers of the central nervous system (CNS), often from a lesion in the brainstem or cerebellum, is called "central" vertigo and is generally associated with less prominent movement illusion and nausea than vertigo of peripheral origin. Vertigo is a sensation of spinning while stationary. It is commonly associated with nausea or vomiting, unsteadiness (postural instability), falls, changes to a person's thoughts, and difficulties in walking. Recurrent episodes in those with vertigo are common and frequently impair the quality of life. Blurred vision, difficulty in speaking, a lowered level of consciousness, and hearing loss may also occur. The signs and symptoms of vertigo can present as a persistent (insidious) onset or an episodic (sudden) onset.

* Vision Disorders, Hemeralopia, Macropsia, Micropsia. A vision disorder is an impairment of the sense of vision. Vision disorder is not the same as an eye disease. Although many vision disorders do have their immediate cause in the eye, there are many other causes that may occur at other locations in the optic pathway. Hemeralopia is the inability to see clearly in bright light and is the exact opposite of nyctalopia (night blindness), the inability to see clearly in low light. Macropsia is a neurological condition affecting human visual perception, in which objects within an affected section of the

visual field appear larger than normal, causing the person to feel smaller than they actually are. Macropsia, along with its opposite condition, micropsia, can be categorized under dysmetropsia.

* Vitreous Disorders. The vitreous body is a transparent, gelatinous substance that is present in the space between the lens and the retina, providing structural stability and maintaining the shape of the eye. Some conditions that can affect the vitreous body are posterior vitreous detachment, vitreous hemorrhage, synchysis scintillans, asteroid hyalosis, and persistent fetal vasculature. The conditions can be asymptomatic or present with floaters in the field of vision, photopsia, and decreased visual acuity.

* Wounds and Injuries occur when the integrity of the skin or other body tissues is compromised (e.g. breaks)

1.1.10 RTS-02

https://archive.org/details/Resonant_Therapy_Sessions_02

Acne, Adrenal Gland Diseases, Back Pain, Bedsores, Blood Coagulation Disorders, Breast Cyst, Breast Diseases, Bronchitis, Cardiac Arrythmias, Cataract, Celiac Disease, Chest Pain, Congenital Abnormalities, Connective Tissue Diseases, Dyspepsia, Epidermolysis Bullosa, Fibrocystic Breast Disease, Furunculosis, Gastroesophageal Reflux, Gonadal Disorders, Hirsutism, Hyperlipidemia Familial-Combined, Hyperopia, Hyperoxaluria, Hypertension, Hypotension, Immunodeficiency Common-Variable, Immunodeficiency Severe-Combined, Immunologic Deficiency Syndromes, Job's Syndrome, Laryngitis, Lentigo, Leucine Metabolism Disorders, Leukopenia, Lung Diseases, Mastoiditis, Melanosis, Metabolic Bone Diseases, Nasal Polyps, Nausea, Neck Pain, Nerve Compression Syndromes, Neutropenia, Nose Congestion, Optic Nerve Diseases, Paraproteinemias, Pharyngitis, Phimosis, Platelet Disorders, Psoriasis, Pulmonary Diseases, Rhinitis, Shock, Shoulder Injuries, Stomatitis Aphtous, Taste Disorders, Tenosynovitis, Torticollis, Vascular Diseases, Vitamin B12 Deficiency, Vitamin D Deficiency, Whooping Cough, Xerostomia

* Acne, often found in people who eat less fruit than the average.

* Blood coagulation disorders, may dispose to hemorrhage, thrombosis,and occasionally both.

* Breast diseases, either of organ system protection or reproductivefunction.

* Cataracts, the most common cause of blindness for the elderly.

* Celiac disease, autoimmune disorder which causes gluten intolerance.

* Congenital abnormalities, a condition present at birth which variesfrom the norm.

* Connective tissue diseases, auto-immune diseases characterizedby cutaneous and systemic manifestations.

* Dyspepsia, indigestion.

* Furunculosis, boils.

* Gonadal disorders, related to both sexes reproductory organs.

* Hirsutism, excessive hairiness.

* Hyperlipidemia, elevated levels of lipids in the blood.

* Hyperopia, farsightedness.

* Hyperoxaluria, excessive urinary excretion of oxalate.

* Hypertension, high blood pressure.

* Hypotension, low blood pressure.

* Immunodeficiency common-variable, genetically determined primary immune defect which affects B cells.

* Immunodeficiency severe-combined, affects B and T-cell mediatedimmunity responses and often cytokine function.

* Immunologic deficiency syndromes, inadequacy of the immunemechanisms to perform their function.

* Job's syndrome, or hyperimmunoglobulin E recurrent infectionsyndrome, repeated staphylococcal infections of the skin due toimpaired immune defenses.

* Lentigo, pigmented spots on the skin.

* Leucine metabolism disorders. Leucine is an essential amino acidutilized in the liver, adipose tissue and muscle tissue.

* Leukopenia, a decrease in the number of white blood cells found inthe blood. It increases the risk of an infection.

* Mastoiditis, infection of the mastoid bone just behind the ear.

* Melanosis, hyperpigmentation associated with increased melanin.

* Metabolic bone diseases, disorders of bone strength,usually caused by abnormalities of minerals (such as calcium orphosphorus), vitamin D, bone mass or bone structure, heel spurs,plantar fasciitis, osteopenia.

* Neutropenia, abnormally low number of neutrophilsin the blood, which leads to increased susceptibilityto disease.

* Optic Nerve Diseases, such as glaucoma.

* Paraproteinemias, presence in the blood of large amountsof any abnormal protein involved in the immune system.

* Phimosis, non-retractability of either the foreskin of the penis orthe clitoral hood.

* Platelet disorders. Platelets are a natural source of growth factors.Platelets are involved in stopping bleeding and subsequent formationof blood cloths.

* Shock, lack of adecuate blood flow to organs and tissues.

* Stomatitis aphtous, mouth ulcers.

* Xerostomia, dry mouth.

1.1.11 RTS-03

https://archive.org/details/Resonant_Therapy_Sessions_03

Agammaglobulinemia, Angiofibroma, Angiolymphoid, Anus Diseases, Aplastic Anemia, Apnea, Appendicits, Arteriosclerosis, Arthritis Rheumatoid, Asthma, Autonomic Nervous System Diseases, Barotrauma, Bursitis, Central Sleep Apnea, Colic, Diabetes Mellitus Type-2, Diabetic Ketoacidosis, Digestive System Diseases, Duodenal Ulcer, Ecchymosis, Epilepsy, Epistaxis, Fibromyalgia, Gallbladder Diseases, Gastrointestinal Disease, Genital Diseases Female, Genital Diseases Male, Gout, Gynecomastia, Headache, Heart Diseases, Hematologic Diseases, Hemorrhoids, Hernia, Histiocytoma Benign Fibrous, Histiocytosis, Hypercholesterolemia, Hyperinsulinism, Hyperventilation, Insulinoma, Intestinal Diseases, Kidney Diseases, Liver Diseases, Meningitis Bacterial, Meningitis Viral, Motion Sickness, Otorhinolaryngologic Disease, Pancreatic Diseases, Pituitary Diseases, Platelet Pool Deficiency, Poliomyelitis, Prognathism, Prostatic Diseases, Rectal Diseases, Rheumatic Disease, Sarcoidosis, Sciatica, Sepsis, Shock Septic, Splenic Diseases, Tennis Elbow, Thyroid Disease, Thrombocytopenia, Tinnitus, Trigeminal Neuralgia, Tympanic Membrane Perforation, Urinary Bladder Diseases,

Urination Disorders, Vaginal Disease, Warts, Wounds- Penetrating&Nonpenetrating

* Agammaglobulinemia, a type of primary immune deficiency disease characterized by absence of gamma globulins.

* Angiofibroma, focal growth of vascular and collagen structures normally found in the skin.

* Angiolymphoid, benign but potentially disfiguring vascular proliferative disease presenting as collections of papules, nodules or plaques, most commonly in the head and neck area.

* Aplastic anemia, a condition where bone marrow does not produce sufficient new cells to replenish blood cells.

* Apnea, temporary absence or cessation of breathing.

* Appendicitis, water fast for 48 hours.

* Arteriosclerosis, hardening (and loss of elasticity) of medium or large arteries.

* Barotrauma, physical damage to body tissues caused by a difference in pressure between internal organs and the outer surface of the body.

* Benign fibrous histiocytoma, benign skin growths which may form as a reaction to previous injuries such as insect bites or thorn pricks.

* Central sleep apnea, imbalanced brain's respiratory control centers during sleep.

* Colic, cyclical cramping abdominal pain either from kidneys or intestines.

* Diabetic ketoacidosis, occurs when the body cannot use sugar (glucose) as a fuel source because there is no insulin or not enough insulin. Fat is used for fuel instead. Byproducts of fat breakdown, called ketones, build up in the body.

* Ecchymosis, hematoma, bruise, the escape of blood into the tissues from ruptured blood vessels.

* Epistaxis, nosebleed.

* Fibromyalgia, disorder characterized by muscle pain, fatigue, joint stiffness, and depression or anxiety.

* Gynecomastia, abnormal development of large mammary glands in males resulting in

breast enlargement.

* Histiocytosis, a condition marked by an abnormal appearance of histiocytes in the blood.

* Hypercholesterolemia, high levels of cholesterol in the blood.

* Hyperinsulinism, an above normal level of insulin in the blood of a person or animal. When liver cells and other cells that remove glucose from the blood become less sensitive to the insulin, the pancreas increases secretion and the level of insulin in the blood rises. However, if insulin resistance worsens or insulin secretion ability declines, the glucose levels will begin to rise.

* Hyperventilation, a state of breathing faster or deeper than normal.

* Insulinoma, tumor of the pancreas that is derived from beta cells and secretes insulin. The secretion of insulin by insulinomas is not properly regulated by glucose and the tumors will continue to secrete insulin causing glucose levels to fall further than normal.

* Platelet pool deficiency, a type of coagulopathy characterized by defects in the granules in platelets.

* Prognathism, abnormal protrusion of the jaw.

* Sarcoidosis, abnormal collections of chronic inflammatory cells (granulomas) form as nodules in multiple organs.

* Sepsis, blood poisoning, septicemia, is a systemic inflammatory response syndrome caused by an infection.

* Septic shock, a condition that results of severe infection and sepsis.

* Tennis elbow, overuse injury occurring in the lateral side of the elbow region.

* Thrombocytopenia, relative decrease of platelets in the blood due to a number of disease processes which may lead to malaise, fatigue and general weakness.

* Tinnitus, perception of sound in the head or the ears.

* Trigeminal neuralgia, nerve disorder that causes a stabbing or electric- shock-like pain in parts of the face.

1.1.12 RTS-04

https://archive.org/details/Resonant_Therapy_Sessions_04

Adiposis Dolorosa, Amyotrophic Lateral Sclerosis, Antiphosholipid Syndrome, Arachnoiditis, Arthrogryposis, Atrial Fibrillation, Cafe au Lait Spots, Central Nervous System Infections, Cerebral Hemorrhage, Cerebro-Vascular Disorders, Chronic Obstructive Pulmonary Disease (COPD), Deglutition Disorders, Dermatitis Exfoliative, Eczema, Epydermal Cyst, Facial Hemiatrophy, Exostosis, Facial Nerve Diseases, Fecal Incontinence, Hemiplegia, Hemoglobinopathies, Henoch–Schönlein Purpura, Hepatitis-B, Hyperostosis, Hypogonadism, Incontinentia Pigmenti, Intermittent Claudication, Intestinal Obstruction, Intracraneal Aneurysm, Ischemic Attack, Jaw Diseases, Knee Joint Pain, Lumbago, Lymphadenitis, Macroglossia, Muscular Dystrophies, Neuromuscular Diseases, Ocular Motility Disorders, Oculomotor Nerve Diseases, Osteomyelitis, Osteoporosis, Paralysis, Pilonidal Sinus, Pneumonia, Reflex Sympathetic Dystrophy, Silicosis, Spinal Cord Diseases, Stridor, Stiff Knees, Stiff Muscles, Stroke, Stroke Follow-up, Systemic Inflammatory Response Syndrome (SIRS), Tremor, Urinary Tract Infections, Varicose Veins, Vasculitis, Vocal Cord Paralysis, Whiplash Injuries

* Adiposis dolorosa, painful folds of fatty (adipose) tissue or the growth of multiple noncancerous (benign) fatty tumors called lipomas.

* Antiphosholipid syndrome, autoimmune production of antibodies against phospholipid (aPL), a cell membrane substance.

* Arachnoiditis, caused by inflammation of the arachnoid, one of the membranes that surround and protect the nerves of the central nervous system.

* Arthrogryposis, congenital disorder marked by generalized stiffness of the joints, often accompanied by muscle and nerve degeneration, resulting in severely impaired mobility of the limbs.

* Cafe au lait spots, macules of a light brown color on the skin.

* Dermatitis exfoliative or erythroderma, an inflammatory skin disease with redness and scaling that affects nearly the entire cutaneous surface.

* Exostosis, formation of new bone on the surface of a bone.

* Hemoglobinopathies, inherited single-gene disorders which result in structural abnormalities of the globin proteins themselves and may be cause of diseases.

* Henoch–Schönlein purpura, involves purple spots on the skin, joint pain, gastrointestinal problems, and glomerulonephritis.

* Hyperostosis, an excessive growth of bone. It may lead to exostosis. It occurs in many

musculoskeletal disorders.

* Hypogonadism, diminished functional activity of the gonads – the testes and ovaries in males and females, respectively – that may result in diminished sex hormone biosynthesis and impaired gamete production and/or regulation.

* Incontinentia pigmenti, rare genetic disorder that affects the skin, hair, teeth, nails, and central nervous system.

* Intermittent claudication, muscle pain (ache, cramp, numbness or sense of fatigue), classically in the calf muscle, which occurs during exercise, such as walking, and is relieved by a short period of rest.

* Lymphadenitis, inflammation of a lymph node.

* Macroglossia, unusual enlargement (hypertrophy) of the tongue.

* Osteomyelitis, bone infection caused by bacteria or other germs.

* Pilonidal sinus, is a cyst or abscess near or on the natal cleft of the buttocks that often contains hair and skin debris.

* Systemic inflammatory response syndrome (SIRS), a severe systemic response to a condition that provokes an acute inflammatory reaction indicated by the presence of some symptoms such as abnormal body temperature, and fast heart and breath rate.

* Vasculitis, a condition in which the body's blood vessels develop inflammation. It occurs if the immune system attacks the blood vessels by mistake.

* Vocal cord paralysis, weakness of one or both vocal folds.

1.1.13 RTS-05

https://archive.org/details/Resonant_Therapy_Sessions_05

5-Hydroxytryptamine Production, Adenoma, Adenomatous Polyposis Coli, Ascorbic Acid Deficiency, Biliary Tract, Brain Concussion, Cancer-Melanoma, Cancer-Nasopharyngeal, Cancer-Paranasal Sinus And Nasal Cavity, Cancer-Prostate, Cancer-Skin, Cardiovascular Diseases, Chronic Fatigue Syndrome, Color Vision Defects, Cranial Nerve Diseases, Craniocerebral Trauma, Cross Infection, Cyanosis, Dermoid Cyst, Ectropion, Diverticulitis, Ehler Danlos Syndrome, Entropion, Erythema, Eye Infections, Facial Neuralgia, Fasciitis, Floaters, Gastritis, Gastroenteritis, Hallux Valgus, Hernia Hiatal, Herpes Simplex 1, Hyperventilation, Hypothermia, Intervertebral Disk Displacement, Intestinal Polyps, Labyrinth Diseases, Lacrimal Apparatus Diseases,

Lactation Disorders, Lichen Planus, Malignant Hyperthermia, Melanoma Amelanotic, Melanoma, Muscle Cramp, Optic Neuritis, Osteomalacia, Panniculitis, Parathyroid Diseases, Pericarditis, Periodontal Diseases, Peripheral Vascular Diseases, Peroxisomal Disorders, Peter's Anomaly, Purpura-Thrombocytopenic, Retinal Detachment, Salivary Gland Diseases, Skin-Scar Tissue Healing, Skin Diseases-Bacterial, Skin Ulcer, Spinal Stenosis, Thrombophlebitis, Venous Insufficiency

* 5-hydroxytryptamine, serotonin.

* Adenoma, benign tumor of glandular origin which may become malignant.

* Adenomatous polyposis coli, a mutation in the APC gene which may result in colorectal cancer.

* Ascorbic acid deficiency, or deficiency of vitamin C, which is required for the synthesis of collagen in humans.

* Brain concussion, mild brain injury, mild traumatic brain injury (MTBI), mild head injury (MHI), minor head trauma.

* Cardiovascular diseases, which involve the heart or blood vessels -arteries, capillaries and veins.

* Chronic fatigue syndrome, severe and continued tiredness that is not relieved by rest and is not directly caused by other medical conditions.

* Cranial nerve disease, an impaired functioning of any of the twelve cranial nerves.

* Craniocerebral trauma, injury to the head whichmay damage the scalp, skull or brain.

* Cyanosis, appearance of a blue or purple coloration of the skin.

* Dermoid cyst, overgrowth of normal, non-cancerous tissue in an abnormal location. Dermoids occur all over the body.

* Diverticulitis, formation of pouches (diverticula) within the bowel wall.

* Ectropion, in which the lower eyelid turns outwards.

* Ehler Danlos syndrome, group of disorders that affect connective tissues, which are tissues that support the skin, bones, blood vessels, and other organs.

* Entropion, where the eyelid (usually the lower lid) folds inward.

* Erythema, abnormal redness of the skin due to local congestion.

* Fasciitis, inflammation of the connective tissue that may be caused by streptococcal or other types of infection, an injury, or an autoimmune reaction.

* Floaters, small particles in the fluid inside your eye.

* Gastritis, inflammation in the protective lining of the stomach.

* Gastroenteritis, infection or irritation of the digestive tract, particularly the stomach and intestine.

* Hallux valgus or bunion, deformity characterized by lateral deviation of the great toe.

* Hernia hiatal, protrusion of the upper part of the stomach into the thorax through a tear or weakness in the diaphragm.

* Herpes simplex 1, viral disease from the herpesviridae family caused by Herpes simplex virus type 1 (HSV-1)

* Hyperventilation, overbreathing is the state of breathing faster or deeper than normal.

* Hypothermia, state in which the body's mechanism for temperature regulation is overwhelmed in the face of a cold stressor.

* Intervertebral disk displacement, or spinal disk herniation.

* Intestinal polyps, colorectal polyps occurring on the lining of the colon or rectum.

* Lactation disorders, disturbances of milk secretion in either sex, not necessarily related to pregnancy.

* Lichen planus, condition that forms an itchy rash on the skin or in the mouth.

* Malignant hyperthermia, condition that is usually triggered by exposure to certain drugs used for general anesthesia.

* Melanoma amelanotic, type of skin cancer in which the cells do not make melanin.

* Melanoma, malignant tumor of melanocytes.

* Optic neuritis, inflammation of the optic nerve that may cause a complete or partial loss of vision.

* Osteomalacia, softening of the bones due to a lack of vitamin D or a problem with the body's ability to break down and use this vitamin.

* Panniculitis, inflammation of the subcutaneous fat.

* Parathyroid diseases, cause of hyperparathyroidism, hypoparathyroidism.

* Pericarditis, inflammation of the pericardium -around the heart.

* Periodontal diseases, infections of the gums and bone that surround and support the teeth.

* Peripheral vascular disorders, obstruction of large arteries other than the coronary, aortic arch vasculature, or brain.

* Peroxisomal disorders, caused by defects in peroxisome functions.

* Peter's Anomaly, abnormality of ocular development which causes corneal opacity.

* Purpura-thrombocytopenic, purpura associated with a reduction in circulating blood platelets.

* Retinal detachment, separation of the light-sensitive membrane in the back of the eye (the retina) from its supporting layers. Common cause of blurred vision.

* Spinal stenosis, narrowing of the spinal canal that causes compression of the spinal nerve cord.

* Thrombophlebitis, swelling (inflammation) of a vein caused by a blood clot.

* Venous insufficiency, where the veins cannot pump enough oxygen-poor blood back to the heart.

1.1.14 RTS-06

https://archive.org/details/Resonant_Therapy_Sessions_06

Aderenoleukodystrophy, Altitude Sickness, Amyloidosis, Aneurysm, Arthritis, Bulbar Palsy Progressive, Bulbospinal Neuronopathy, Calcaneal Apophysitis, Cancer-General, Cancer-General Main, Cancer-Metastasis General, Cancer-Residual, Capsulitis Adhesive, Cardiac Failure, Chloasma, Cholesterol Embolism, Chondromalacia Patellae, Cirrhosis Liver, Coma, Cystic Fibrosis, Dermatomyositis, Down Syndrome-Symptoms Only, Emphysema Pulmonary, Erysipelas, Fetal Diseases-General, Galactosemias, General Fibrosis Syndrome, Hand Foot And Mouth Syndrome, Hepatitis C, Hidradenitis Suppurativa, Hutchinson's Melanotic Freckle, Hyperglicemic Hyperosmolar Nonketotic Coma, Hyperpituitarism, Hyperthermia, Infertility, Keratosis Actinic, Keratosis

Seborrheic, Kidney Dialysis, Kidney Failure, Lordosis, Lymphatic Diseases, Measles, Mumps, Myopathies Structural, Neuralgic Amyotrophy, Neurofibromatosis, Oliguria, Osteoarthritis, Osteochondritis, Papilloma, Paraneoplastic Syndromes-Nervous System, Periphlebitis, Peroneal Muscular Atrophy, Polymyositis, Polyneuropathies, Polyradiculoneuropathy Acute Inflammatory, Post-Cosmetic Reconstruction, Prostate-Enlarged, Pterygium, Rosacea, Scoliosis, Skin-Infectious Diseases, Skin Mole, Spinal Cord Inflammation, Spinal Muscular Atrophy, Spondylitis Ankylosing, Suture Techniques, Tachycardia, Tonsillitis, Vesication

* Adrenoleukodystrophy, several closely related inherited disorders that disrupt the breakdown (metabolism) of certain fats, and their accumulation in tissues like myelin disrupt health.

* Altitude sickness, pathological effect of high altitude on humans.

* Amyloidosis, group of diseases resulting from abnormal deposition of certain proteins (amyloids) in various bodily areas.

* Aneurysm, a sac formed by localized dilatation of the wall of an artery or a vein.

* Bulbar palsy progressive, degeneration of motor neurons in the cerebral cortex, spinal cord, brain stem, and pyramidal tracts.

* Bulbospinal neuronopathy, progressive degeneration of motor neurons in the spinal cord resulting in weakness and muscular atrophy, usually without evidence of injury to the corticospinal tracts.

* Calcaneal apophysitis, painful inflammation of the heel' s growth plate.

* Cancer General Main, based upon the main frequency for all cancers. Regular use.

* Capsulitis adhesive, shoulder stiffness and pain caused by tightening of the joint capsule.

* Chloasma, melasma, facial tan or dark skin discoloration.

* Cholesterol embolism, small deposits of cholesterol that become lodged inside blood vessels.

* Chondromalacia Patellae, chronic softening and degeneration of the cartilage on the underside of the kneecap.

* Cystic fibrosis, inherited condition that causes severe damage to the lungs and digestive system.

* Dermatomyositis, muscle disease that involves inflammation and a skin rash.

* Erysipelas, acute streptococcus bacterial infection of the upper dermis and superficial lymphatics.

* Galactosemias, condition in which the body is unable to use (metabolize) the simple sugar galactose.

* General fibrosis syndrome, replacement of normal muscle tissue by fibrous tissue of varying degrees.

* Hidradenitis Suppurativa, disease of the sweat glands characterized by recurrent boil-like lumps (nodules) under the skin.

* Hutchinson's melanotic freckle, melanoma 'in situ' that consists of malignant cells but does not show invasive growth.

* Hyperglicemic hyperosmolar nonketotic coma, or diabetic coma caused by hyperglicemia and dehydration.

* Hyperpituitarism, where the pituitary gland does not produce normal amounts of some or all of its hormones.

* Hyperthermia, elevated body temperature due to thermoregulation failure, usually from heat stroke or adverse drug reaction.

* Infertility, sterility.

* Keratosis actinic, premalignant condition[2] of thick, scaly, or crusty patches of skin.

* Keratosis seborrheic, most common types of noncancerous skin growths in older adults.

* Kidney dialysis, helps impaired kidneys perform their function.

* Lordosis, abnormal forward curvature of the spine in the lumbar region, resulting in a swaybacked posture.

* Measles, or rubeola, infection of the respiratory system caused by a paramyxovirus.

* Mumps, contagious disease of the salivary glands, caused by the mumps virus, that leads to painful swelling.

* Myopathies structural, muscular disease in which the muscle fibers do not function for any one of many reasons, resulting in muscular weakness.

* Neuralgic amyotrophy, characterized by episodes of severe pain and muscle wasting (amyotrophy) in one or both shoulders and arms.

* Neurofibromatosis, genetic disease in which patients develop multiple soft tumors (neurofibromas).

* Oliguria, low output of urine.

* Osteoarthritis, or wear and tear arthritis is the most common type of arthritis.

* Osteochondritis, painful type of osteochondrosis where the cartilage or bone in a joint is inflamed.

* Papilloma, benign epithelial tumor growing exophytically (outwardly projecting) in finger-like fronds.

* Paraneoplastic syndromes of the nervous system, disease or symptom that is the consequence of the presence of cancer in the body, but is not due to the local presence of cancer cells.

* Periphlebitis, inflammation of tissues around a vein, or of the external coat of a vein.

* Peroneal muscular atrophy, group of inherited disorders of the peripheral nervous system characterised by progressive loss of muscle tissue and touch sensation across various parts of the body.

* Polymyositis, inflammatory disease that leads to muscle weakness, swelling (inflammation), tenderness, and damage.

* Polyneuropathies, simultaneous malfunction of many peripheral nerves throughout the body.

* Polyradiculoneuropathy acute inflammatory, causes progressive muscle weakness and paralysis -the complete inability to use a particular muscle or muscle group.

* Pterygium, membrane like growth in response to exposure to ultraviolet light.

* Rosacea, chronic condition characterized by facial redness and sometimes pimples.

* Scoliosis, causes a sideways curve of your backbone, or spine.

* Skin mole, growths on the skin which happen when skin's pigment cells -melanocytes, grow in clusters.

* Spinal cord inflammation, different neurological conditions which results to individuals

suffering from back pain. It may be caused by viral infection, bacteria or auto immune disease.

* Spinal muscular atrophy, group of inherited diseases that cause muscle damage and weakness, which get worse over time and eventually lead to death.

* Spondylitis ankylosing, inflammatory disease that can cause some of the vertebrae in your spine to fuse together.

1.1.15 RTS-07

https://archive.org/details/Resonant_Therapy_Sessions_07

Acidosis, Addictions Alcohol-General, Addictions Drug-General, Addison Disease, Adhesions Pelvic, Adnexitis, Aganglionosis Colonic, Aldosteronism, All Microbes And Disease, Alpha1 Antitrypsin Deficiency, Amblyopia, Amniotic Band Syndrome, Angina Pectoris, Antiseptic Effect, Cancer-Brain Tumor, Cancer-Breast, Cancer-Kidney, Cancer-Leukemia, Cancer-Lung, Cancer Thyroid, Cardiomyopathy Dilated, Causalgia, Cervix Incompetence, Dyslipidemias, Dyspareunia, Encephalitis, Fibrodysplasia OP, Gastric Stasis, General Prophylaxis, Hair Loss, Hemosiderosis, Herpes Simplex Encephalitis, Herpes Zoster, Hypercalcemia, Hyperpigmentation Disorders, Hyphema, Hypokalemia, Hypopituitarism, IgA Nephropathy, Insomnia, Interstitial Cystitis, Irritable Bowel Syndrome, Light Sensitivity, Marfan Syndrome, Middle Ear Cholesteatoma, Mitochondrial Diseases, Mucopolysaccharidoses, Muscle Tonic, Neuropathy Hereditary-Autonomic Type 3, Neuropathy Hereditary Motor-Sensory Type 4, Orthostatic Hypotension, Osteonecrosis, Penile Induration, Peripheral Nervous System Diseases, Pleurisy, Polyarteritis Nodosa, Puerperal Disorders, Pulmonary Fibrosis, Scleroma Nasal, Skin And Connective Tissue Diseases, Testicular Diseases, Thrombosis, Uveitis, Varicella, Voice Disorders, Wegener's Granulomatosis

* Acidosis, increased acidity in the blood and other body tissues.

* Addison disease, adrenal hormones disorder with symptoms of weight loss, muscle weakness, fatigue, low blood pressure, and skin color changes.

* Adhesions pelvic, bands of scar tissue that attach to organs in the pelvis.

* Adnexitis, inflammatory disease that affects the fallopian tubes and ovaries, or the uterus.

* Aganglionosis colonic, when part or all of the large intestine or antecedent parts of the gastrointestinal tract have no nerves and therefore cannot function.

* Aldosteronism, abnormality of the body's electrolyte balance, caused by excessive secretion of aldosterone by the adrenal cortex.

* Alpha 1 antitrypsin deficiency, condition in which the body does not make enough of a protein that protects the lungs and liver from damage.

* Amblyopia, decrease in vision in one or both eyes with no apparent structural abnormality.

* Amniotic band syndrome, congenital birth defects caused by the entrapment of fetal body parts by fibrous amniotic bands during pregnancy.

* Angina pectoris, chest pain due to an inadequate supply of oxygen to the heart muscle.

* Cardiomyopathy dilated, when the heart becomes weakened and enlarged.

* Causalgia, pain syndrome related to partial peripheral nerve injuries.

* Cervix incompetence, painless spontaneous dilatation of the cervix, is a common cause of 2 nd trimester pregnancy failure.

* Dyslipidemias, an abnormal amount of lipids (e.g. cholesterol and/or fat) in the blood.

* Dyspareunia, painful sexual intercourse, usually in women, due to medical or psychological causes.

* Encephalitis, irritation and swelling (inflammation) of the brain, most often due to infections.

* Fibrodysplasia ossificans progressiva, disorder in which muscle and connective tissue, such as tendons and ligaments, are gradually replaced by bone.

* Gastric stasis, delayed gastric emptying in the absence of a mechanical obstruction, with symptoms such as nausea and vomiting.

* General prophylaxis, disease prevention.

* Hemosiderosis, excessive deposition of hemosiderin in bodily tissues as a result of the breakdown of red blood cells.

* Herpes simplex encephalitis, condition caused by infection with a herpes simplex virus (HSV). The HSV infection can lead to encephalitis, which is brain swelling.

* Herpes zoster, painful, blistering skin rash. It is caused by the varicella-zoster virus.

This is the virus that also causes chickenpox.

* Hypercalcemia, too much calcium in the blood, usually symptom of other disease.

* Hyperpigmentation disorders, affect the color of the skin.

* Hyphema, blood in the front chamber of the eye.

* Hypokalemia, potentially fatal condition in which the body fails to retain sufficient potassium to maintain health.

* Hypopituitarism, deficiency in any of the pituitary hormones production.

* IgA nephropathy, kidney disorder caused by deposits of the protein immunoglobulin A (IgA) inside the glomeruli (filters) within the kidney.

* Interstitial cystitis, characterized by a feeling or need to urinate immediately or frequently, often with pelvic pain. It is a chronic inflammatory condition of the submucosal and muscular layers of the bladder.

* Irritable bowel syndrome, more common in middle age women, some symptoms are abdominal, cramping, and changes in bowel movements.

* Light sensitivity, notable or increased reactivity to light.

* Marfan syndrome, disorder that affects the connective tissue in many parts of the body.

* Middle ear cholesteatoma, is a type of skin cyst located in the middle ear and skull bone (mastoid).

* Mitochondrial diseases, mitochondria are responsible for processing oxygen and converting substances from food, associated problems can lead to many age related diseases.

* Mucopolysaccharidoses, group of inherited metabolic diseases caused by the absence or malfunctioning of certain enzymes.

* Neuropathy hereditary autonomic type4, group of disorders characterized by the loss of sensation (sensory loss), especially in the feet and legs and, less severely, in the hands and forearms.

* Neuropathy hereditary motor-sensory type3, group of neuropathies affecting motor and sensory peripheral nerves.

* Orthostatic hypotension, also referred to as head rush or dizzy spell, is a temporary

lowering of blood pressure, usually related to suddenly standing up.

* Osteonecrosis, bone death caused by poor blood supply to the area.

* Osteonecrosis, bone death caused by poor blood supply to the area.

* Penile induration, medical condition that produces a bent penis during erection.

* Peripheral nervous system diseases, affect the nerves and ganglia outside of the brain and spinal cord.

* Pleurisy, inflammation of the pleura, the lining surrounding the lungs.

* Polyarteritis nodosa, autoimmune disease that causes chronic inflammation of the small and medium arteries of the body.

* Puerperal disorders, associated with the six-to-eight-week period immediately following labor and delivery.

* Pulmonary fibrosis, or scarring of the lung, is the formation or development of excess fibrous connective tissue in the lungs.

* Scleroma nasal, chronic inflammation of tissues in the mucous membrane of the nose and upper respiratory tracts.

* Thrombosis, formation of a blood clot inside a blood vessel, obstructing the flow of blood through the circulatory system.

* Uveitis, swelling and irritation of the uvea, the middle layer of the eye.

* Varicella, (chickenpox) is an infection caused by the varicella-zoster virus (VZV). It causes an itchy, blister-like rash. Is highly contagious to people who haven't had the disease.

* Wegener's granulomatosis, autoimmune disease in which blood vessels and other tissues become inflammed.

1.1.16 RTS-08

https://archive.org/details/Resonant_Therapy_Sessions_08

Alkaptonuria, Angioma, Arteritis temporal, Blepharitis, Cancer-Colon, Cellulitis, Cellulitis Orbital, Conjunctivitis, Croup, Cryoglobulinemia, Dermatofibroma, Diabetic Retinopathy, Dupuytren's Contracture, Empty Sella Syndrome, Endocrine Diseases, Endometriosis,

Esophageal Diseases, Esophagopharyngeal Diverticulum, Fasciitis Necrotizing, Fibrosis, Fistula, Glaucoma, Halitosis, Hearing Disorders, Hodgkin's Disease, Human Flu, Hydronephrosis, Hyperprolactinemia, Keratitis, Keratitis Ulcerative, Knee Injury, Lambert-Eaton Myasthenic Syndrome, Lung Diseases-Interstitial, Lysosomal Storage Diseases, Mixed Connective Tissue Disease, Myoclonus, Nocturia, Normal Pressure Hydrocephalus, Nystagmus, Otitis Interna, Papillitis Optica, Paronychia, Penile Diseases, Peptic Ulcer, Polymyalgia Rheumatica, Polyradiculopathy, Popliteal Cyst, Pruritus Vulvae, Respiratory Distress Syndrome-Newborn, Retinopathy of Prematurity, Retroperitoneal Fibrosis, Smell Disorders, TMJ Disorders, TMJ Syndrome, Trachoma, Urinary Tract Diseases, Uterine Fibroids, Uterine Inversion, Uterine Prolapse, Vulvar Diseases

* Alkaptonuria, genetic defect that makes the body unable to properly break down tyrosine and phenylalanine, causing the accumulation and eventual excretion of alkapton.

* Angioma is a benign tumor derived from cells of the vascular or lymphatic vessel walls (endothelium) or derived from cells of the tissues surrounding these vessels.

* Arteritis temporal, inflammation and damage to the blood vessels that supply blood to the head.*Blepharitis, swelling or inflammation of the eyelids, usually where the eyelash hair follicles are located.

* Cellulitis is a bacterial infection involving the inner layers of the skin. It specifically affects the dermis and subcutaneous fat. Signs and symptoms include an area of redness which increases in size over a couple of days. The borders of the area of redness are generally not sharp and the skin may be swollen. While the redness often turns white when pressure is applied this is not always the case. The area of infection is usually painful. Lymphatic vessels may occasionally be involved, and the person may have a fever and feel tired.

* Cellulitis orbital, acute infection of the tissues immediately surrounding the eye, including the eyelids, eyebrow, and cheek.

* Colorectal cancer (also known as colon cancer, rectal cancer, or bowel cancer) is the development of cancer in the colon or rectum (parts of the large intestine). It is due to the abnormal growth of cells that have the ability to invade or spread to other parts of the body. Signs and symptoms may include blood in the stool, a change in bowel movements, weight loss, and feeling tired all the time.

* Conjunctivitis, any inflammatory condition of the membrane that lines the eyelids and covers the exposed surface of the sclera.

* Croup, or laryngotracheobronchitis, infection that affects mostly younger children

(under 5-6). It causes swelling in the child’s vocal cords, which is what causes the barky cough.

* Cryoglobulinemia, systemic disease characterized by presence in blood of immune complexes called cryoglobulins.
* Dermatofibroma, benign dermal nodules that represent a focal proliferation of fibroblasts; the overlying epidermis is slightly thickened.

* Diabetic retinopathy, common diabetic eye disease caused by changes in retinal blood vessels.*Dupuytren's contracture, abnormal thickening and tightening of the normally elastic tissue beneath the skin of the palm and fingers.

* Empty sella syndrome, condition in which the pituitary gland shrinks or becomes flattened. It can be seen in 30% of the people over the age of 30 years.

* Endocrine diseases, arise either because of too much or too little or sometimes no hormone.*Endometriosis, female health disorder that occurs when cells from the lining of the womb (uterus) grow in other areas of the body.

* Esophagopharyngeal diverticulum, pouches that develop in the pharynx just above the upper esophageal sphincter.

* Fasciitis necrotizing, commonly known as flesh-eating disease or flesh-eating bacteria syndrome.

* Fibrosis, formation of excess fibrous connective tissue in an organ or tissue in a reparative or reactive process.

* Fistula, abnormal connection between an organ, vessel, or intestine and another structure.

* Glaucoma, disease in which damage to the optic nerve leads to progressive, irreversible vision loss.

* Halitosis, bad breath produced by poor oral hygiene, sinus infections, tonsillitis, certain foods, smoking, and other medical disorders.

* Hearing disorders, impairment of the sense of hearing.

* Hodgkin's disease, type of lymphoma, a cancer that starts in white blood cells called lymphocytes.

* Hydronephrosis, swelling of the kidneys when urine flow is obstructed in any part of the urinary tract.

* Hyperprolactinemia, is the most common endocrine disorder of the hypothalamic-

pituitary axis. In women may cause hypo-oestrogenism with anovulatory infertility and a decrease in menstruation. In men, decreased libido, sexual dysfunction (in both men and women), erectile dysfunction, infertility and gynaecomastia.

* Keratitis ulcerative, inflammation of the cornea of the eye, characterized by the presence of corneal erosions or ulcers.

* Keratitis, inflammation of the cornea, the transparent membrane that covers the colored part of the eye (iris) and pupil of the eye.

* Lambert-Eaton myasthenic syndrome, neuromuscular disorder which causes progressive muscle weakness, usually first noticed in the upper legs and upper arms.

* Lung interstitial diseases, large group of diseases that inflame or scar the lungs. The inflammation and scarring make it hard to get enough oxygen.

* Lysosomal storage diseases, produce an abnormal accumulation of a protein, lipid, pigment, or other compound in the body.

* Mixed connective tissue disease, features signs and symptoms of a combination of disorders — primarily of lupus, scleroderma and polymyositis.

* Myoclonus, sudden and uncontrollable jerks of a muscle or a group of muscles.

* Nocturia, to wake at night one or more times for urinating.

* Normal pressure hydrocephalus, clinical symptom complex caused by the build-up of cerebrospinal fluid.

* Nystagmus, involuntary eye movement.

* Otitis interna, an inflammation of the inner ear; can cause vertigo and vomiting.

* Papillitis optica, characterized by inflammation and deterioration of the portion of the optic nerve known as the optic disk

* Paronychia is a soft tissue infection around a fingernail. It is from injury to the area, such as biting off or picking a hangnail or from trimming or pushing back the cuticle.

* Peptic ulcer disease (PUD), also known as a peptic ulcer or stomach ulcer, is a break in the lining of the stomach, first part of the small intestine, or occasionally the lower esophagus.

* Polymyalgia rheumatica (PMR) is a syndrome with pain or stiffness, usually in the neck, shoulders, upper arms, and hips, but which may occur all over the body. The pain can be very sudden, or can occur gradually over a period. Most people with PMR wake

up in the morning with pain in their muscles; however, cases have occurred in which the person has developed the pain during the evenings or has pain and stiffness all day long.

* Polyradiculopathy, damage to multiple nerve roots sufficient to produce neurologic symptoms and signs such as pain, weakness, and sensory loss.

* Popliteal cyst also known as a Baker's cyst, is a benign swelling of the semimembranosus or more rarely some other synovial bursa found behind the knee joint.

* Pruritus vulvae, itching of the external female genitalia.

* Retinopathy of prematurity (ROP) is a disease of the eye affecting prematurely-born babies generally having received intensive neonatal care, in which oxygen therapy is used on them due to the premature development of their lungs. It is thought to be caused by disorganized growth of retinal blood vessels which may result in scarring and retinal detachment. ROP can be mild and may resolve spontaneously, but it may lead to blindness in serious cases. As such, all preterm babies are at risk for ROP, and very low birth weight is an additional risk factor. Both oxygen toxicity and relative hypoxia can contribute to the development of ROP.

* Retroperitoneal fibrosis or Ormond's disease is a disease featuring the proliferation of fibrous tissue in the retroperitoneum, the compartment of the body containing the kidneys, aorta, renal tract, and various other structures. It may present with lower back pain, kidney failure, hypertension, deep vein thrombosis, and other obstructive symptoms.

* TMJ disorders or temporomandibular joint pathology covers the range of disorders wich may affect the temporomandibular joint (the joints which connect the mandible to the skull).

* TMJ syndrome or temporomandibular joint dysfunction syndrome is an umbrella term covering pain and dysfunction of the muscles of mastication (the muscles that move the jaw) and the temporomandibular joints (the joints which connect the mandible to the skull). The most important feature is pain, followed by restricted mandibular movement, and noises from the temporomandibular joints (TMJ) during jaw movement.

* Trachoma, a form of chronic inflammation of the transparent mucous membrane that lines the eyelids and covers the white of the eye (conjunctiva).

* Uterine fibroids, benign tumors that form on the wall of a woman's uterus.

* Uterine inversion, when the placenta fails to detach from the uterine wall just after the baby is born.

*Uterine prolapse, occurs when the womb (uterus) drops down and presses into the vaginal area.

1.1.17 RTS-09

https://archive.org/details/Resonant_Therapy_Sessions_09

African Sleeping Sickness, Anhydrosis, Aortic Valve Stenosis, Arteriovenous Malformations, Asbestosis, Ascariasis, Balanitis, Bone Hypertrophy, Bone Spurs, Cancer-Larynx, Cancer-Liver, Cancer-Oral, Cancer-Ovarian, Cancer-Respiratory Tract, Cancer-Stomach, Chagas Disease, Chilblains, Dentigerous Cyst, Diabetes Gestational, Disseminated Intravascular Coagulation, Eclampsia, Endodontics, Giardiasis, Gingivitis, Heart Abnormalities, Heart Catheterization, Heart Hypertrophy, Hepatitis-A, Hydrocephalus, Hyperemesis Gravidarum, Inflammatory Myopathy, Inflammatory Response, Klinefelter Syndrome, Leaky Gut Syndrome, Leg Ulcer, Leishmaniasis, Leprosy, Leptospirosis, Maxillofacial Procedures, Nail Fungus, Neural Tube Defects, Odontogenic Tumors, Onchocerciasis, Ophthalmia, Oral Health, Polycystic Ovary Syndrome, Polyhydramnios, Refractive Errors, Serotonin Syndrome, Strabismus, Strabismus Convergent, Strabismus Divergent, Stress, Sudden Hearing Loss, Thoracic Outlet Syndrome, Ulnar Nerve Compression, Urethral Stricture, Urinary Retention, Varicocele, Yaws

* African trypanosomiasis or sleeping sickness is a parasitic disease of humans and other animals. It is caused by protozoa of the species Trypanosoma brucei. There are two types that infect humans, Trypanosoma brucei gambiense (T.b.g) and Trypanosoma brucei rhodesiense (T.b.r.). T.b.g causes over 98% of reported cases. Both are usually transmitted by the bite of an infected tsetse fly and are most common in rural areas.

* Anhidrosis is the complete absence of sweating, while hypohidrosis is weating less than normal. If the human body cannot sweat properly it cannot cool itself, which is potentially harmful. Sweating allows heat to be released from the body. If the lack of sweating affects a small area of the body, it is not usually dangerous. However, overall anhidrosis or hypohidrosis can result in overheating and eventually heatstroke, a potentially life-threatening condition.

* Aortic valve stenosis — or aortic stenosis — occurs when the heart's aortic valve narrows. This narrowing prevents the valve from opening fully, which obstructs blood flow from the heart into the aorta and onward to the rest of the body. When the aortic valve is obstructed, the heart needs to work harder to pump blood. Eventually, this extra work limits the amount of blood it can pump and may weaken the heart muscle. Aortic stenosis is the most common valvular heart disease in the developed world. Aortic stenosis is most commonly caused by age-related progressive calcification (>50% of

cases) with a mean age of 65 to 70 years. Another major cause of aortic stenosis is the calcification of a congenital bicuspid aortic valve[14] (30-40% of cases) typically presenting earlier, in those aged 40+ to 50+.

* Arteriovenous malformation (AVM) is an abnormal connection between arteries and veins, bypassing the capillary system. This vascular anomaly is widely known because of its occurrence in the central nervous system, but can appear in any location. Although many AVMs are asymptomatic, they can cause intense pain or bleeding or lead to other serious medical problems.

* Asbestosis is a chronic inflammatory and scarring disease affecting the tissue of the lungs. People with the condition may experience severe shortness of breath and are at an increased risk for certain cancers, including lung cancer and, less commonly, mesothelioma. Asbestosis specifically refers to fibrosis within the lung tissue from asbestos, and not scarring around the outside of the lungs.

* Ascariasis is a disease caused by the parasitic roundworm Ascaris lumbricoides. Infections have no symptoms in more than 85% of cases, especially if the number of worms is small. Symptoms increase with the number of worms present and may include shortness of breath and fever in the beginning of the disease. These may be followed by symptoms of abdominal swelling, abdominal pain, and diarrhea. Children are most commonly affected, and in this age group the infection may also cause poor weight gain, malnutrition, and learning problems.

* Balanitis is an inflammation of the glans (the rounded head) of the penis. Balanitis can occur at any age, but is more likely to affect boys under four years of age, as well as adult males who have not been circumcised. When bacteria or yeast spread under the foreskin and into the soft tissues, the body reacts by creating inflammation.

* Bone hypertrophy is a bone remodeling disease that results in an increase in the mass of bone per unit of volume. It occurs where a muscle, tendon or ligament inserts into the bone surface after recurrent use.

* Bone spurs, osteophytes or parrot beak, are bony projections that form along joint margins. They should not be confused with enthesophytes, which are bony projections that form at the attachment of a tendon or ligament.

* Chagas disease, also known as American trypanosomiasis, is a tropical parasitic disease caused by the protozoan Trypanosoma cruzi. It is spread mostly by insects known as Triatominae or kissing bugs. The human disease occurs in two stages: an acute stage, which occurs shortly after an initial infection, and a chronic stage that develops over many years.

* Chilblains is a medical condition that occurs when a predisposed individual is exposed to cold and humidity, causing tissue damage. It is often confused with frostbite and trench foot. Damage to capillary beds in the skin causes redness, itching, inflammation,

and sometimes blisters. Chilblains can be reduced by keeping the feet and hands warm in cold weather, and avoiding extreme temperature changes. Chilblains can be idiopathic (spontaneous and unrelated to another disease), but may also be a manifestation of another serious medical condition that needs to be investigated. A history of chilblains is suggestive of a connective tissue disease (such as lupus).

* A dentigerous cyst or follicular cyst is an odontogenic cyst - thought to be of developmental origin - associated with the crown of an unerupted (or partially erupted) tooth. The cyst cavity is lined by epithelial cells derived from the reduced enamel epithelium of the tooth forming organ. Regarding its pathogenesis, it has been suggested that the pressure exerted by an erupting tooth on the follicle may obstruct venous flow inducing accumulation of exudate between the reduced enamel epithelium and the tooth crown.

* Gestational diabetes also known as gestational diabetes mellitus (GDM), is when a women without diabetes, develop high blood sugar levels during pregnancy. Gestational diabetes generally results in few symptoms. It; however, increases the risk of pre-eclampsia, depression, and requiring a Caesarean section. Babies born to mothers with poorly treated gestational diabetes are at increased risk of being too large, having low blood sugar after birth, and jaundice. If untreated, it can also result in a stillbirth. Long term, children are at higher risk of being overweight and developing type 2 diabetes.

* Disseminated intravascular coagulation is a pathological process characterized by the widespread activation of the clotting cascade that results in the formation of blood clots in the small blood vessels throughout the body. This leads to compromise of tissue blood flow and can ultimately lead to multiple organ damage. In addition, as the coagulation process consumes clotting factors and platelets, normal clotting is disrupted and severe bleeding can occur from various sites.

* Eclampsia is the onset of seizures (convulsions) in a woman with pre-eclampsia. Pre-eclampsia is a disorder of pregnancy in which there is high blood pressure and either large amounts of protein in the urine or other organ dysfunction. Onset may be before, during, or after delivery. Most often it is during the second half of pregnancy. The seizures are of the tonic–clonic type and typically last about a minute. Following the seizure there is typically either a period of confusion or coma. Complications include aspiration pneumonia, cerebral hemorrhage, kidney failure, and cardiac arrest.

* Endodontic therapy or root canal therapy is a sequence of treatment for the infected pulp of a tooth which results in the elimination of infection and the protection of the decontaminated tooth from future microbial invasion. Root canals and their associated pulp chamber are the physical hollows within a tooth that are naturally inhabited by nerve tissue, blood vessels and other cellular entities which together constitute the dental pulp.

* Giardiasis (popularly known as beaver fever) is a zoonotic parasitic disease caused by the flagellate protozoan Giardia lamblia (also sometimes called Giardia intestinalis and

Giardia duodenalis). The giardia organism inhabits the digestive tract of a wide variety of domestic and wild animal species, as well as humans. It is one of the most common pathogenic parasitic infections in humans worldwide. Symptoms vary from none to severe diarrhea with poor absorption of nutrients. It can result in weakness, loss of appetite, stomach cramps, vomiting, bloating, excessive gas, and burping. Symptoms typically develop 9–15 days after exposure, but may occur as early as one day. Symptoms are caused by Giardia organisms infecting the cells of the duodenum and jejunum of the small intestine and blocking nutrient absorption. Most people are asymptomatic; only about a third of those infected exhibit symptoms. If the infection is not treated, these symptoms may last for six weeks or more.

* Gingivitis ("inflammation of the gum tissue") is a non-destructive periodontal disease. The most common form of gingivitis, and the most common form of periodontal disease overall, is in response to bacterial biofilms (also called plaque) adherent to tooth surfaces, termed plaque-induced gingivitis.

* Heart abnormalities are structural problems arising from abnormal formation of the heart or major blood vessels.

* Heart catheterization refers to a group of procedures that are performed using this method, such as coronary angiography and left ventricle angiography. Once the catheter is in place, it can be used to perform a number of procedures including angioplasty, percutaneous coronary intervention (PCI), balloon septostomy, electrophysiology study or catheter ablation. Procedures can be diagnostic or therapeutic.

* Heart hypertrophy is the abnormal enlargement, or thickening, of the heart muscle, resulting from increases in cardiomyocyte size and changes in other heart muscle components, such as extracellular matrix. Causes can be physiological, for example, the amount of exercise performed by an athlete, or pathological, for example, as a result of hypertension or valvular disease.

* Hepatitis A is an acute infectious disease of the liver caused by the hepatitis A virus (HAV). Many cases have few or no symptoms, especially in the young. The time between infection and symptoms, in those who develop them, is between two and six weeks. When symptoms occur, they typically last eight weeks and may include nausea, vomiting, diarrhea, jaundice, fever, and abdominal pain. Around 10–15% of people experience a recurrence of symptoms during the six months after the initial infection. Acute liver failure may rarely occur with this being more common in the elderly. It is usually spread by eating or drinking food or water contaminated with infected feces. Shellfish which have not been sufficiently cooked are a relatively common source. It may also be spread through close contact with an infectious person. While children often do not have symptoms when infected, they are still able to infect others.

* Hydrocephalus is a medical condition in which there is an abnormal accumulation of cerebrospinal fluid (CSF) in the brain. This causes increased intracranial pressure

inside the skull and may cause progressive enlargement of the head if it occurs in childhood, potentially causing convulsion, tunnel vision, and mental disability. It was once informally called "Water on the brain."

* Hyperemesis gravidarum (HG) is a complication of pregnancy that is characterized by severe nausea and vomiting such that weight loss and dehydration occur. Signs and symptoms may include vomiting several times a day and feeling faint. It is more severe than morning sickness. Often symptoms get better after the 20th week of pregnancy but may last the entire pregnancy.

* Inflammatory myopathy (inflammatory muscle disease or myositis) is disease featuring weakness and inflammation of muscles and (in some types) muscle pain. The cause of much inflammatory myopathy is unknown (idiopathic), and such cases are classified according to their symptoms and signs and electromyography, MRI and laboratory findings. It can also be associated with underlying cancer. The main classes of idiopathic inflammatory myopathy are polymyositis (PM), dermatomyositis (DM), and inclusion-body myositis (IBM).

* An inflammatory response or sepsis syndrome represents a systemic response to infection and is defined as either hypothermia or hyperthermia, tachycardia, tachypnea, and evidence of inadequate organ function or perfusion manifested by at least one of the following: altered mental status, hypoxemia, acidosis, oliguria, or disseminated intravascular coagulation.

* Klinefelter syndrome, describes a set of features that can occur in a male who is born with an extra X chromosome in his cells. Males with this disorder may have larger than normal breasts, a lack of facial and body hair, a rounded body type, and small testicles. Klinefelter syndrome is a common genetic condition affecting males and, often isn't diagnosed until adulthood. Most men with Klinefelter syndrome produce little or no sperm.

* Leaky gut syndrome is a little known but very common disorder that refers to an irritated and inflamed small intestine. This irritation or inflammation results in foreign substances being absorbed into the bloodstream thus causing symptoms and other health problems.

* Leg ulcer refers to full thickness skin loss on the leg or foot due to any cause. Leg ulcers occur in association with a range of disease processes, most commonly with blood circulation diseases.

* Leishmaniasis, also spelled leishmaniosis, is a disease caused by protozoan parasites of the genus Leishmania and spread by the bite of certain types of sandflies. The disease can present in three main ways: cutaneous, mucocutaneous, or visceral leishmaniasis. The cutaneous form presents with skin ulcers, while the mucocutaneous form presents with ulcers of the skin, mouth, and nose, and the visceral form starts with skin ulcers and then later presents with fever, low red blood cells, and enlarged spleen

and liver.

* Leprosy is primarily a granulomatous disease of the peripheral nerves and mucosa of the upper respiratory tract; skin lesions (light or dark patches) are the primary external sign. If untreated, leprosy can progress and cause permanent damage to the skin, nerves, limbs, and eyes. Secondary infections, in turn, can result in tissue loss causing fingers and toes to become shortened and deformed, as cartilage is absorbed into the body.

* Leptospirosis is an infection caused by corkscrew-shaped bacteria called Leptospira. Signs and symptoms can range from none to mild such as headaches, muscle pains, and fevers; to severe with bleeding from the lungs or meningitis. If the infection causes the person to turn yellow, have kidney failure and bleeding, it is then known as Weil's disease. If it causes lots of bleeding from the lungs it is known as severe pulmonary hemorrhage syndrome. Leptospirosis is transmitted by the urine of an infected animal and is contagious as long as the urine is still moist. Although Leptospira has been detected in reptiles and birds, only mammals are able to transmit the bacterium to humans and other animals.

* Maxillofacial procedures are utilized when a structural defect, disease or injury of the facial bones affects the way they work in a negative manner.

* Nail fungus or Onychomycosis is the most common disease of the nails and constitutes about half of all nail abnormalities. This condition may affect toenails or fingernails, but toenail infections are particularly common. It occurs in about 10 percent of the adult population.

* Neural tube defects (NTDs) are a group of conditions in which an opening in the spinal cord or brain remains from early in human development. In the 3rd week of pregnancy called gastrulation, specialized cells on the dorsal side of the embryo begin to change shape and form the neural tube. When the neural tube does not close completely, an NTD develops.

* Odontogenic tumors are dental neoplasms of the cells or tissues that initiate odontogenic processes. Examples include Adenomatoid odontogenic tumor, Ameloblastoma, a type of odontogenic tumor involving ameloblasts, Calcifying epithelial odontogenic tumor, Keratocystic odontogenic tumor, Odontogenic myxoma, and Odontoma.

* Onchocerciasis, also known as river blindness and Robles disease, is a disease caused by infection with the parasitic worm Onchocerca volvulus. Symptoms include severe itching, bumps under the skin, and blindness. It is the second most common cause of blindness due to infection, after trachoma.

* Ophthalmia is inflammation of the eye. It is a medical sign which may be indicative of various conditions, including sympathetic ophthalmia (inflammation of both eyes

following trauma to one eye), gonococcal ophthalmia, trachoma or "Egyptian" ophthalmia, ophthalmia neonatorum (a conjunctivitis of the newborn due to either of the two previous pathogens), photophthalmia and actinic conjunctivitis (inflammation resulting from prolonged exposure to ultraviolet rays), and others.

* Oral health, dental comprehensive, includes Periodontal disease.

* Polycystic ovary syndrome (PCOS) is a set of symptoms due to elevated androgens (male hormones) in women. Signs and symptoms of PCOS include irregular or no menstrual periods, heavy periods, excess body and facial hair, acne, pelvic pain, difficulty getting pregnant, and patches of thick, darker, velvety skin. Associated conditions include type 2 diabetes, obesity, obstructive sleep apnea, heart disease, mood disorders, and endometrial cancer.

* Polyhydramnios is the excessive accumulation of amniotic fluid — the fluid that surrounds the baby in the uterus during pregnancy. Polyhydramnios occurs in about 1 percent of pregnancies. Most cases of polyhydramnios are mild and result from a gradual buildup of amniotic fluid during the second half of pregnancy. Severe polyhydramnios may cause shortness of breath, preterm labor, or other signs and symptoms.

* Refractive errors, also known as refraction errors, are a problem with focusing of light on the retina due to the shape of the eye. The most common types of refractive error are near-sightedness, far-sightedness, astigmatism, and presbyopia. Near-sightedness results in far objects being blurry, far-sightedness result in close objects being blurry, astigmatism causes objects to appear stretched out or blurry, and presbyopia results in a poor ability to focus on close objects. Other symptoms may include double vision, headaches, and eye strain.

* Serotonin syndrome is a predictable consequence of excess serotonin on the CNS and/or peripheral nervous system. Hyperserotonemia may occur following therapeutic drug use, combination, overdose of particular drugs, or the recreational use of certain drugs. Excessive levels of serotonin produce a spectrum of specific symptoms including cognitive, autonomic, and somatic effects.

* Strabismus is a condition in which the eyes do not properly align with each other. This interferes with binocular vision because it prevents a person from directing both eyes simultaneously towards the same fixation point. It also typically affects depth perception. Strabismus typically involves a lack of coordination between the extraocular muscles. Strabismus is present in about 4% of children. Treatment should be started as early as possible to ensure the development of the best possible visual acuity and stereopsis.

* Strabismus convergent or esotropia is a form of strabismus, or "squint," in which one or both eyes turns inward. The condition can be constantly present, or occur intermittently, and can give the affected individual a "cross-eyed" appearance. Esotropia is sometimes erroneously called “lazy eye,” which describes the condition of amblyopia

—a reduction in vision of one or both eyes that is not the result of any pathology of the eye and cannot be resolved by the use of corrective lenses. Amblyopia can, however, arise as a result of esotropia occurring in childhood.

* Strabismus divergent, exotropia, divergent squint or wall eyes, is a form of strabismus where the eyes are deviated outward. It is the opposite of esotropia. People with exotropia often experience crossed diplopia. Intermittent exotropia is a fairly common condition. "Sensory exotropia" occurs in the presence of poor vision. Infantile exotropia (sometimes called "congenital exotropia") is seen during the first year of life, and is less common than "essential exotropia" which usually becomes apparent several years later. The brain's ability to see three-dimensional objects depends on proper alignment of the eyes. When both eyes are properly aligned and aimed at the same target, the visual portion of the brain fuses the forms into a single image. When one eye turns inward, outward, upward, or downward, two different pictures are sent to the brain. This causes loss of depth perception and binocular vision. There have also been some reports of people that can "control" their afflicted eye.

* Stress is a feeling of strain and pressure. Stress can be external and related to the environment, but may also be created by internal perceptions. Humans experience stress, or perceive things as threatening, when they do not believe that their resources for coping with obstacles (stimuli, people, situations, etc.) are enough for what the circumstances demand. When we think the demands being placed on us exceed our ability to cope, we then perceive stress.

* Sudden sensorineural hearing loss (SSHL), commonly known as sudden deafness, occurs as an unexplained, rapid loss of hearing—usually in one ear—either at once or over several days.

* Thoracic outlet syndrome (TOS) is a term used to describe a group of disorders that occur when there is compression, injury, or irritation of the nerves and/or blood vessels (arteries and veins) in the lower neck and upper chest area. Thoracic outlet syndrome is named for the space (the thoracic outlet) between your lower neck and upper chest where this grouping of nerves and blood vessels is found.

* Ulnar nerve compression is classified by location of entrapment. The ulnar nerve passes through several small tunnels and outlets through the medial upper extremity, and at these points the nerve is vulnerable to compression or entrapment—a so-called "pinched nerve". The nerve is particularly vulnerable to injury when there has been a disruption in the normal anatomy. The most common site of ulnar nerve entrapment is at the elbow, followed by the wrist.

* Urethral stricture is scarring in or around the urethra that narrows or blocks the passageway through which urine flows from the bladder. The stricture results from inflammation, infection or injury, and is much more common in men than in women. The scarring can occur anywhere between the bladder and the tip of the penis. In addition to uncomfortable urinary symptoms such as reduced flow rate and more frequent

urination, a urethral stricture can lead to complications that include urinary tract infections, prostatitis, urinary retention and kidney damage.

* Urinary retention is the inability to voluntarily urinate. Acute urinary retention is the sudden and often painful inability to void despite having a full bladder. Chronic urinary retention is painless retention associated with an increased volume of residual urine. Patients with urinary retention can present with complete lack of voiding, incomplete bladder emptying, or overflow incontinence. Complications include infection and renal failure.

* Varicocele is the medical term for varicose veins in the scrotum. Varicoceles form in the veins that run along the spermatic cord. Blood from the testicles flows back into the body along those veins. Varicoceles form in a similar way to varicose veins in the legs, where blood builds up in the veins causing permanent swelling.

* Yaws is a tropical infection of the skin, bones and joints caused by the spirochete bacterium Treponema pallidum pertenue. The disease begins with a round, hard swelling of the skin, 2 to 5 centimeters in diameter. The center may break open and form an ulcer. This initial skin lesion typically heals after three to six months. After weeks to years, joints and bones may become painful, fatigue may develop, and new skin lesions may appear. The skin of the palms of the hands and the soles of the feet may become thick and break open. The bones (especially those of the nose) may become misshapen. After five years or more large areas of skin may die leaving a scar. Yaws is spread by direct contact with the fluid from a lesion of an infected person. The contact is usually of a non-sexual nature. The disease is most common among children, who spread it by playing together.

1.1.18 RTS-10

https://archive.org/details/Resonant_Therapy_Sessions_10

AIDS-HIV, Adenomyosis, Alkalosis, All Diabetes Comprehensive, Bacterial Infections Specific Cold-Flu, Cancer-Endometrial, Cancer-Gastrointestinal, Cancer-Rectal, Cancer-Testicular, Cancer-Urologic, Cementoma, Cerclage Cervical, Chorioretinitis, Choroideremia, Ciliary Dyskinesia Primary, Cryptosporoidosis, Dementias Transmissible, Diabetes Insipidus, Diabetes Mellitus Type-1, Diabetic Neuralgia, Empyema Pleural, Endoscopy, Eye Abnormalities, Gastrointestinal Hemorrhage, Hemochromatosis, Hemorrhage Postpartum, Hemorrhagic Shock, Hepatic Venous Outflow Obstruction, Hot Flashes, Hyperkalemia, Hypocalcemia, Hypoglycemia, Hyponatremia, Hypophosphatemia, Hypospadias, Infectious Mononucleosis, Lactose Intolerance, Laryngeal Stenosis, Mandibulofacial Dysostosis, Morvan Disease, Neurologic Disorders, Neuroma Acoustic, Neromyotonia, Ocular Retraction Syndrome, Optic Atrophies Hereditary, Osteogenesis Imperfecta, Pelvic Inflammatory Disease, Proctocolitis, Pupil Disorders, Raynaud Disease, Renal Artery Stenosis, Salmonella

Infections, Sicca Syndrome, Testicular Torsion, Thalassemia, Thyroiditis, Urogenital Surgical Procedures, Vitiligo, Vomiting, Yersinia Infections

* AIDS-HIV or human immunodeficiency virus infection and acquired immune deficiency syndrome is a spectrum of conditions caused by infection with the human immunodeficiency virus (HIV). Following initial infection, a person may not notice any symptoms or may experience a brief period of influenza-like illness.Typically, this is followed by a prolonged period with no symptoms. As the infection progresses, it interferes more with the immune system, increasing the risk of common infections like tuberculosis, as well as other opportunistic infections, and tumors that rarely affect people who have working immune systems. These late symptoms of infection are referred to as AIDS. This stage is often also associated with weight loss.

* Adenomyosis is a medical condition characterized by the presence of ectopic glandular tissue found in the muscular wall of the uterus (myometria). The term adenomyosis is derived from the Greek terms adeno- (meaning gland), myo- (meaning muscle), and -osis (meaning condition). Previously named as endometriosis interna, but adenomyosis differs from endometriosis and these two diseases represent two separate entities. They are found together in many cases. It usually refers to ectopic endometrial tissue (the inner lining of the uterus) within the myometrium (the thick, muscular layer of the uterus). The term "adenomyometritis" specifically implies involvement of the uterus. The condition is typically found in women between the ages of 35 and 50 but can also be present in younger women. Patients with adenomyosis often present with painful and/or profuse menses (dysmenorrhea & menorrhagia, respectively). Other possible symptoms are pain during sexual intercourse, chronic pelvic pain and irritation of the urinary bladder.

* Alkalosis is the result of a process reducing hydrogen ion concentration of arterial blood plasma (alkalemia). In contrast to acidemia (serum pH 7.35 or lower), alkalemia occurs when the serum pH is higher than normal (7.45 or higher). Alkalosis is usually divided into the categories of respiratory alkalosis and metabolic alkalosis or a combined alkalosis. Respiratory alkalosis is caused by hyperventilation, resulting in a loss of carbon dioxide. Hyperventilation-induced alkalosis can be seen in several deadly central nervous system diseases such as strokes or Rett syndrome. Metabolic alkalosis can be caused by repeated vomiting, resulting in a loss of hydrochloric acid within the stomach content. Severe dehydration, and the consumption of alkali are other causes. It can also be caused by administration of diuretics and endocrine disorders such as Cushing's syndrome. As respiratory acidosis often accompanies the compensation for metabolic alkalosis, and vice versa, a delicate balance is created between these two conditions. Metabolic alkalosis is usually accompanied with low blood potassium level, causing, e.g., muscular weakness, muscle pain, and muscle cramps (from disturbed function of the skeletal muscles), and muscle spasms (from disturbed function of smooth muscles). It may also cause low blood calcium levels.

* All diabetes comprehensive -type-1, type-2, Onset. Diabetes is a group of metabolic diseases in which there are high blood sugar levels over a prolonged period. Symptoms of high blood sugar include frequent urination, increased thirst, and increased hunger. If left untreated, diabetes can cause many complications. Acute complications can include diabetic ketoacidosis, nonketotic hyperosmolar coma, or death. Serious long-term complications include heart disease, stroke, chronic kidney failure, foot ulcers, and damage to the eyes. Diabetes is due to either the pancreas not producing enough insulin or the cells of the body not responding properly to the insulin produced.

* Bacterial Gram (+) and (-) Bacterial infections Specific to cold & flu inc. Pneumonia.

* Primary ciliary dyskinesia, is a rare, ciliopathic, autosomal recessive genetic disorder that causes defects in the action of cilia lining the respiratory tract (lower and upper, sinuses, Eustachian tube, middle ear) and fallopian tube, as well as in the flagella of sperm cells. The phrase "immotile ciliary syndrome" is no longer favored as the cilia do have movement, but may be inefficient or unsynchronized. The main consequence of impaired ciliary function is reduced or absent mucus clearance from the lungs, and susceptibility to chronic recurrent respiratory infections, including sinusitis, bronchitis, pneumonia, and otitis media.

* Cementoma is an odontogenic tumor of cementum. It usually occurs after root development is finished, found predominantly in African American women older than 40. It is found most commonly in the mandible in the region of the lower molar teeth. It causes distortion of surrounding areas but is a usually painless growth, at least initially. Considerable thickening of the cementum can often be observed. A periapical form is also recognized.

* Cervical cerclage, also known as a cervical stitch, is a treatment for cervical incompetence or insufficiency, when the cervix starts to shorten and open too early during a pregnancy causing either a late miscarriage or preterm birth. Usually the treatment is done in the second trimester of pregnancy, for a woman who had either one or more late miscarriages in the past. In women with a prior spontaneous preterm birth and who are pregnant with one baby, and have shortening of the cervical length less than 25 mm, a cerclage prevents a preterm birth and reduces death and illness in the baby.

* Chorioretinitis is an inflammation of the choroid (thin pigmented vascular coat of the eye) and retina of the eye. It is a form of posterior uveitis. If only the choroid is inflamed, not the retina, the condition is termed choroiditis. Symptoms may include the presence of floating black spots, blurred vision, pain or redness in the eye, sensitivity to light, or excessive tearing. Chorioretinitis is often caused by toxoplasmosis and cytomegalovirus infections (mostly seen in immunodeficient subjects such as people with AIDS or on immunosuppressant drugs). Congenital toxoplasmosis via transplacental transmission can also lead to sequelae such as chorioretinitis along with hydrocephalus and cerebral calcifications. Other possible causes of chorioretinitis are syphilis, sarcoidosis, tuberculosis, Behcet's disease, onchocerciasis, or West Nile virus. Chorioretinitis may

also occur in presumed ocular histoplasmosis syndrome (POHS).

* Choroideremia is a rare X-linked recessive inherited disorder giving rise to retinal disease and eventual blindness, resulting from degeneration of the choriocapillaris of the choroid and of the retinal pigment epithelium of the retina. The disease results in progressive loss of vision, almost exclusively in males; in childhood, night blindness is the most common first symptom. As the disease progresses, vision loss results, frequently starting as an irregular ring that gradually expands both in toward central vision and out toward the extreme periphery; progression continues throughout the individual's life, where both the rate of change and the degree of visual loss are variable among those affected, even within the same family.

* Cryptosporidiosis, also known as crypto, is a parasitic disease caused by Cryptosporidium, a genus of protozoan parasites in the phylum Apicomplexa. It affects the distal small intestine and can affect the respiratory tract in both immunocompetent (i.e., individuals with a normal functioning immune system) and immunocompromised (e.g., persons with HIV/AIDS) individuals, resulting in watery diarrhea with or without an unexplained cough. In immunocompromised individuals, the symptoms are particularly severe and can be fatal. It is primarily spread through the fecal-oral route, often through contaminated water; recent evidence suggests that it can also be transmitted via fomites in respiratory secretions. Cryptosporidium is the organism most commonly isolated in HIV-positive patients presenting with diarrhea. Despite not being identified until 1976, it is one of the most common waterborne diseases and is found worldwide. The parasite is transmitted by environmentally hardy microbial cysts (oocysts) that, once ingested, exist in the small intestine and result in an infection of intestinal epithelial tissue.

* Transmissible dementias, transmissible spongiform encephalopathies, also known as prion diseases, are a group of progressive conditions that affect the brain (encephalopathies) and nervous system of many animals, including humans. According to the most widespread hypothesis, they are transmitted by prions, though some other data suggest an involvement of a Spiroplasma infection. Mental and physical abilities deteriorate and myriad tiny holes appear in the cortex causing it to appear like a sponge (hence spongiform) when brain tissue obtained at autopsy is examined under a microscope. The disorders cause impairment of brain function, including memory changes, personality changes and problems with movement that worsen over time. Prion diseases of humans include classic Creutzfeldt–Jakob disease, new variant Creutzfeldt–Jakob disease (nvCJD, a human disorder related to bovine spongiform encephalopathy), Gerstmann–Sträussler–Scheinker syndrome, fatal familial insomnia, kuru, and the recently discovered variably protease-sensitive prionopathy. These conditions form a spectrum of diseases with overlapping signs and symptoms.

* Diabetes insipidus (DI) is a condition characterized by excessive thirst and excretion of large amounts of severely dilute urine, with reduction of fluid intake having no effect on the concentration of the urine. There are different types of DI, each with a different set of causes. The most common type in humans is the neurological form, called central DI

(CDI), which involves a deficiency of arginine vasopressin (AVP), also known as antidiuretic hormone (ADH). The second common type of DI is nephrogenic diabetes insipidus (NDI), which is due to kidney or nephron dysfunction caused by an insensitivity of the kidneys or nephrons to ADH. DI can also be gestational, or caused by alcohol or some types of drug abuse. DI should not be confused with nocturia.

* Diabetes mellitus type 1 (also known as type 1 diabetes) is a form of diabetes mellitus in which not enough insulin is produced. The lack of insulin results in high blood sugar levels. The classical symptoms are frequent urination, increased thirst, increased hunger, and weight loss. Additional symptoms may include blurry vision, feeling tired, and poor healing. Symptoms typically develop over a short period of time. The classical symptoms of type 1 diabetes include: polyuria (excessive urination), polydipsia (increased thirst), dry mouth, polyphagia (increased hunger), fatigue, and weight loss. Many type 1 diabetics are diagnosed when they present with diabetic ketoacidosis. The signs and symptoms of diabetic ketoacidosis include dry skin, rapid deep breathing, drowsiness, abdominal pain, and vomiting.

* Diabetic neuropathies are nerve damaging disorders associated with diabetes mellitus. These conditions are thought to result from diabetic microvascular injury involving small blood vessels that supply nerves (vasa nervorum) in addition to macrovascular conditions that can culminate in diabetic neuropathy. Relatively common conditions which may be associated with diabetic neuropathy include third nerve palsy; mononeuropathy; mononeuropathy multiplex; diabetic amyotrophy; a painful polyneuropathy; autonomic neuropathy; and thoracoabdominal neuropathy. Diabetic neuropathy affects all peripheral nerves including pain fibers, motor neurons and the autonomic nervous system. It, therefore, can affect all organs and systems, as all are innervated.

* Pleural empyema, also known as pyothorax or purulent pleuritis, is empyema (an accumulation of pus) in the pleural cavity that can develop when bacteria invade the pleural space, usually in the context of a pneumonia. It is one of various kinds of pleural effusion. There are three stages: exudative, when there is an increase in pleural fluid with or without the presence of pus; fibrinopurulent, when fibrous septa form localized pus pockets; and the final organizing stage, when there is scarring of the pleura membranes with possible inability of the lung to expand. Simple pleural effusions occur in up to 40% of bacterial pneumonias. Most cases present themselves in the setting of a pneumonia, although up to one third of patients do not have clinical signs of pneumonia and as many as 25% of cases are associated with trauma (including surgery). Typical symptoms include cough, chest pain, shortness of breath and fever.

* Endoscopy means looking inside and typically refers to looking inside the body for medical reasons using an endoscope, an instrument used to examine the interior of a hollow organ or cavity of the body. For treatment purposes the endoscope may help perform tasks such as cauterization of a bleeding vessel, widening a narrow esophagus, clipping off a polyp or removing a foreign object.

* Eye abnormalities are the congenital absence of or defects in structures of the eye; may also be hereditary.

* Gastrointestinal bleeding (GI bleed), also known as gastrointestinal hemorrhage, is all forms of bleeding in the gastrointestinal tract, from the mouth to the rectum. When there is significant blood loss over a short time, symptoms may include vomiting red blood, vomiting black blood, bloody stool, or black stool. Small amounts of bleeding over a long time may cause iron-deficiency anemia resulting in feeling tired or heart-related chest pain. Other symptoms may include abdominal pain, shortness of breath, pale skin, or passing out. Sometimes in those with small amounts of bleeding no symptoms may be present.

* Hemochromatosis, indicates accumulation of iron in the body from any cause. The most important causes are hereditary haemochromatosis (HHC), a genetic disorder, and transfusional iron overload, which can result from repeated blood transfusions. Organs commonly affected by haemochromatosis are the liver, heart, and endocrine glands. Haemochromatosis may present with the following clinical syndromes: Cirrhosis of the liver; varies from zonal iron deposition to fibrosis (cirrhosis). Diabetes due to selective iron deposition in pancreatic islet beta cells leading to functional failure and cell death. Cardiomyopathy. Arthritis, from calcium pyrophosphate deposition in joints;the most commonly affected joints are those of the hands, particularly the knuckles of the second and third fingers. Testicular failure. Bronzing of the skin. Joint pain and bone pain.

* Hemorrhage postpartum is often defined as the loss of more than 500 ml or 1,000 ml of blood within the first 24 hours following childbirth. Some have added the requirement that there also be signs or symptoms of low blood volume for the condition to exist. Signs and symptoms may initially include: an increased heart rate, feeling faint upon standing, and an increased breath rate. As more blood is lost the women may feel cold, their blood pressure may drop, and they may become restless or unconscious. The condition can occur up to six weeks following delivery.

* Hemorrhagic shock is a condition produced by rapid and significant loss of blood which lead to hemodynamic instability, decreases in oxygen delivery, decreased tissue perfusion, cellular hypoxia, organ damage and can be rapidly fatal. People suffering injuries that involve heavy bleeding may go into hemorrhagic shock if the bleeding isn’t stopped immediately.

* Hepatic venous outflow obstruction (Budd–Chiari syndrome) is a condition caused by occlusion of the hepatic veins that drain the liver. It presents with the classical triad of abdominal pain, ascites, and liver enlargement. The formation of a blood clot within the hepatic veins can lead to hepatic venous outflow. It occurs in 1 out of a million individuals. The syndrome can be fulminant, acute, chronic, or asymptomatic. The acute syndrome presents with rapidly progressive severe upper abdominal pain, yellow discoloration of the skin and whites of the eyes, liver enlargement, enlargement of the spleen, fluid accumulation within the peritoneal cavity, elevated liver enzymes, and

eventually encephalopathy. The fulminant syndrome presents early with encephalopathy and ascites. Liver cell death and severe lactic acidosis may be present as well. Caudate lobe enlargement is often present. The majority of patients have a slower-onset form of Budd–Chiari syndrome. This can be painless. A system of venous collaterals may form around the occlusion which may be seen on imaging as a "spider's web." Patients may progress to cirrhosis and show the signs of liver failure. On the other hand, incidental finding of a silent, asymptomatic form may not be a cause for concern.

* Hot flashes (also known as hot flushes) are a form of flushing due to reduced levels of estradiol. Hot flashes are a symptom which may have several other causes, but which is often caused by the changing hormone levels that are characteristic of menopause. They are typically experienced as a feeling of intense heat with sweating and rapid heartbeat, and may typically last from two to thirty minutes for each occurrence. Hot flashes, a common symptom of menopause and perimenopause, are typically experienced as a feeling of intense heat with sweating and rapid heartbeat, and may typically last from two to thirty minutes for each occurrence, ending just as rapidly as they began. The sensation of heat usually begins in the face or chest, although it may appear elsewhere such as the back of the neck, and it can spread throughout the whole body. Some women feel as if they are going to faint. In addition to being an internal sensation, the surface of the skin, especially on the face, becomes hot to the touch. This is the origin of the alternative term "hot flush", since the sensation of heat is often accompanied by visible reddening of the face. Excessive flushing can lead to rosacea.

* Hyperkalemia is an elevated level of the electrolyte potassium (K+) in the blood. The symptoms of elevated potassium are nonspecific, and the condition is usually discovered by a blood test performed for another reason. Extreme hyperkalemia is a medical emergency, due to the risk of potentially fatal abnormal heart rhythms (arrhythmia). The symptoms of an elevated potassium level are nonspecific, and generally include malaise, palpitations, and muscle weakness. Hyperventilation may indicate a compensatory response to metabolic acidosis, which is one of the possible causes of hyperkalemia. Hyperkalemia develops when there is excessive production (oral intake, tissue breakdown) or ineffective elimination of potassium. Ineffective elimination can be hormonal (in aldosterone deficiency) or due to causes in the kidney parenchyma that impair excretion. Increased extracellular potassium levels result in depolarization of the membrane potentials of cells due to the increase in the equilibrium potential of potassium. This depolarization opens some voltage-gated sodium channels, but also increases the inactivation at the same time. Since depolarization due to concentration change is slow, it never generates an action potential by itself; instead, it results in accommodation. Above a certain level of potassium the depolarization inactivates sodium channels, opens potassium channels, thus the cells become refractory. This leads to the impairment of neuromuscular, cardiac, and gastrointestinal organ systems. Of most concern is the impairment of cardiac conduction, which can cause ventricular fibrillation, abnormally slow heart rhythms, or asystole.

* Hypocalcemia is the presence of low serum calcium levels in the blood. Common causes of hypocalcemia include hypoparathyroidism, vitamin D deficiency, and chronic

kidney disease. Symptoms of hypocalcemia include neuromuscular irritability (including tetany or bronchospasm), electrocardiographic changes, and seizures. The neuromuscular symptoms of hypocalcemia are due to the decreased interaction of calcium with sodium channels. Since calcium blocks sodium channels and inhibits depolarization of nerve and muscle fibers, diminished calcium lowers the threshold for depolarization. Resulting symptoms are convulsions, arrhythmias, tetany and numbness/parasthesias in hands, feet, around mouth and lips.

* Hypoglycemia, also known as low blood sugar, is when blood sugar decreases to below normal levels. This may result in a variety of symptoms including clumsiness, trouble talking, confusion, loss of consciousness, seizures, or death. A feeling of hunger, sweating, shakiness, and weakness may also be present. Symptoms typically come on quickly. The most common cause of hypoglycemia is medications used to treat diabetes mellitus such as insulin and sulfonylureas. Risk is greater in diabetics who have eaten less than usual, exercised more than usual, or have drunk alcohol. Other causes of hypoglycemia include kidney failure, certain tumors, such as insulinoma, liver disease, hypothyroidism, starvation, inborn error of metabolism, severe infections, reactive hypoglycemia, and a number of drugs including alcohol. Low blood sugar may occur in babies who are otherwise healthy who have not eaten for a few hours.

* Hyponatremia, is a low sodium level in the blood. Symptoms can vary from none to severe. Mild symptoms include a decreased ability to think, headaches, nausea, and poor balance. Severe symptoms include confusion, seizures, and coma. Hyponatremia is one of the most commonly seen water–electrolyte imbalances. It occurs in about 20% of those admitted to hospital and 10% of people during or after an endurance sporting event. Among those in hospital hyponatremia is associated with an increased risk of death. Signs and symptoms of hyponatremia include nausea and vomiting, headache, short-term memory loss, confusion, lethargy, fatigue, loss of appetite, irritability, muscle weakness, spasms or cramps, seizures, and decreased consciousness or coma.

* Hypophosphatasia is a rare, and sometimes fatal, metabolic bone disease. Clinical symptoms are heterogeneous, ranging from the rapidly fatal, perinatal variant, with profound skeletal hypomineralization and respiratory compromise, to a milder, progressive osteomalacia later in life. There is a remarkable variety of symptoms that depends, largely, on the age of the patient at initial presentation, ranging from death in utero to relatively mild problems with dentition in adult life. Although several clinical sub-types of the disease have been characterized, based on the age at which skeletal lesions are discovered, the disease is best understood as a single continuous spectrum of severity.

* Hypospadias is a birth defect of the urethra in the male where the urinary opening is not at the usual location on the head of the penis. It is the second most common birth abnormality in boys, affecting approximately 1 of every 250. In approximately 90% of cases, the opening (meatus) is on or near the head of the penis (glans), referred to as distal hypospadias, while the remainder have proximal hypospadias with a meatus near or within the scrotum. Shiny tissue seen extending from the meatus to the tip of the

glans, which would have made the urinary channel, is referred to as the urethral plate. In most cases the foreskin is also underdeveloped and does not wrap completely around the penis, leaving the underside of the glans penis uncovered. There may also be downward bending of the penis. The scrotum may be higher than usual to either side of the penis, adding to the abnormal overall appearance. The most common associated defect is an undescended testicle.

* Infectious mononucleosis (IM), also known as mono, or glandular fever, is an infection commonly caused by the Epstein–Barr virus (EBV). Most people are infected by the virus as children, when the disease produces little or no symptoms. In young adults, the disease often results in fever, sore throat, enlarged lymph nodes in the neck, and feeling tired. Most people get better in two to four weeks; however, feeling tired may last for months. The liver or spleen may also become swollen. In less than one percent of cases splenic rupture may occur. Infectious mononucleosis is usually caused by Epstein–Barr virus (EBV), also known as human herpesvirus 4, which is a member of the herpes virus family. A few other viruses may also cause the disease. It is primarily spread through saliva but can rarely be spread through semen or blood. Spread may occur by objects such as drinking glasses or toothbrushes. Those who are infected can spread the disease weeks before symptoms develop.

* Lactose intolerance is the inability of adults and children to digest lactose, a sugar found in milk and to a lesser extent dairy products, causing side effects. It is due to a lactase deficiency, or hypolactasia. Lactose intolerant individuals have insufficient levels of lactase, an enzyme that catalyzes the hydrolysis of lactose into glucose and galactose, in their digestive system. In most cases, this causes symptoms which may include abdominal bloating and cramps, flatulence, diarrhea, nausea, rumbling stomach, or vomiting after consuming significant amounts of lactose. Most mammals normally cease to produce lactase (lactase nonpersistence), becoming lactose intolerant, after weaning, but some human populations have developed lactase persistence, in which lactase production continues into adulthood.

* Laryngotracheal stenosis refers to abnormal narrowing of the central air passageways. This can occur at the level of the larynx, trachea, carina or main bronchi. In a small number of patients narrowing may be present in more than one anatomical location. The most common symptom of laryngotracheal stenosis is gradually-worsening breathlessness (dyspnea) particularly when undertaking physical activities (exertional dyspnea). The patient may also experience added respiratory sounds which in the more severe cases can be identified as stridor but in many cases can be readily mistaken for wheeze.

* Mandibulofacial dysostosis is a syndrome that includes palpebral antimongoloid fissures, hypoplasia of the facial bones, macrostomia, vaulted palate, malformations of both the external and internal ear, buccal-auricular fistula, abnormal development of the neck with stretching of the cheeks, accessory facial fissures, and skeletal deformities.

* Morvan disease is a rare autoimmune disease characterized by irregular contractions

of the long muscles, cramping, weakness, pruritus, hyperhidrosis, insomnia, and delirium. It normally presents with a slow insidious onset over months to years. Approximately 90% of cases spontaneously go into remission, while the other 10% of cases lead to death.

* Neurologic disorder is any disorder of the body nervous system. Structural, biochemical or electrical abnormalities in the brain, spinal cord or other nerves can result in a range of symptoms. Examples of symptoms include paralysis, muscle weakness, poor coordination, loss of sensation, seizures, confusion, pain and altered levels of consciousness. There are many recognized neurological disorders, some relatively common, but many rare. The specific causes of neurological problems vary, but can include genetic disorders, congenital abnormalities or disorders, infections, lifestyle or environmental health problems including malnutrition, and brain injury, spinal cord injury or nerve injury.

* An acoustic neuroma or vestibular schwannoma is a benign primary intracranial tumor of the myelin-forming cells of the vestibulocochlear nerve (8th cranial nerve). A type of schwannoma, this tumor arises from the Schwann cells responsible for the myelin sheath that helps keep peripheral nerves insulated. The primary symptoms of vestibular schwannoma are unexplained unilateral hearing loss and tinnitus, pressure in the ear (plugged or "full" ear) and vestibular (disequilibrium) symptoms. Treatment by surgery or radiation often results in substantial or complete hearing loss in the affected ear. Observation (non-treatment) over time also usually results in hearing loss in the affected ear. Larger tumors can press on the trigeminal nerve (CN V), causing facial numbness and tingling - constantly or intermittently. Paradoxically, the facial nerve (CN VII) is rarely involved pre-operatively; although it may be compressed by the tumor, it is unusual for patients to experience weakness or paralysis of the face.

* Neuromyotonia is a form of peripheral nerve hyperexcitability that causes spontaneous muscular activity resulting from repetitive motor unit action potentials of peripheral origin. As a result of muscular hyperactivity patients may present with muscle cramps, stiffness, myotonia-like symptoms (slow relaxation), associated walking difficulties, hyperhidrosis (excessive sweating), myokymia (quivering of a muscle), fasciculations (muscle twitching), fatigue, exercise intolerance, myoclonic jerks and other related symptoms. The symptoms (especially the stiffness and fasciculations) are most prominent in the calves, legs, trunk, and sometimes the face and neck, but can also affect other body parts. NMT symptoms may fluctuate in severity and frequency. Symptoms range from mere inconvenience to debilitating. At least a third of people also experience sensory symptoms.

* Ocular retraction syndrome or Duane syndrome s a congenital rare type of strabismus most commonly characterized by the inability of the eye to move outwards. Duane syndrome is most probably a miswiring of the eye muscles, causing some eye muscles to contract when they shouldn't and other eye muscles not to contract when they should. The characteristic features of the syndrome are, limitation of abduction (outward movement) of the affected eye, less marked limitation of adduction (inward movement)

of the same eye, retraction of the eyeball into the socket on adduction, with associated narrowing of the palpebral fissure (eye closing), widening of the palpebral fissure on attempted abduction, poor convergence, and a head turn to the side of the affected eye to compensate for the movement limitations of the eye(s) and to maintain binocular vision.

* Optic hereditary atrophies are the end result of inherited optic neuropathies that damage nerve cells anywhere between the retinal ganglion cells and the lateral geniculate body (anterior visual system). The optic nerve contains axons of nerve cells that emerge from the retina, leave the eye at the optic disc, and go to the visual cortex where input from the eye is processed into vision. There are 1.2 million optic nerve fibers that derive from the retinal ganglion cells of the inner retina. The inherited optic neuropathies typically manifest as symmetric bilateral central visual loss. Optic nerve damage in most inherited optic neuropathies is permanent and progressive. Leber's hereditary optic neuropathy (LHON) is the most frequently occurring mitochondrial disease, and this inherited form of acute or subacute vision loss predominantly affects young males. LHON usually presents with rapid vision loss in one eye followed by involvement of the second eye (usually within months). Visual acuity often remains stable and poor (around or below 20/200) with a residual central visual field defect. Patients with the 14484/ND6 mutation are most likely to have visual recovery. Dominant optic atrophy is an autosomal dominant disease caused by a defect in the nuclear gene OPA1. A slowly progressive optic neuropathy, dominant optic atrophy, usually presents in the first decade of life and is bilaterally symmetrical. Examination of these patients shows loss of visual acuity, temporal pallor of the optic discs, centrocecal scotomas with peripheral sparing, and subtle impairments in color vision. Behr's syndrome is a rare autosomal recessive disorder characterized by early-onset optic atrophy, ataxia, and spasticity. Berk–Tabatznik syndrome is a condition that shows symptoms of short stature, congenital optic atrophy and brachytelephalangy. This condition is extremely rare.

* Osteogenesis imperfecta (OI), also known as brittle bone disease or Lobstein syndrome, is a congenital bone disorder characterized by brittle bones that are prone to fracture. OI may also present with shorter height, neurological features including communicating hydrocephalus, basilar invagination, and seizures, blue sclerae, hearing loss, or other complications. The fractures themselves can cause acute or chronic pain, reduced quality of life, and depression. .People with OI are born with defective connective tissue, or without the ability to make it.

* Pelvic inflammatory disease is an infection of the upper part of the female reproductive system namely the uterus, fallopian tubes, and ovaries, and inside of the pelvis. Signs and symptoms, when present may include lower abdominal pain, vaginal discharge, fever, burning with urination, pain with sex, irregular menstruation, cerrvical motion tenderness, new or different discharge, uterine tenderness, or adnexal tenderness may be noted. Other complications include endometritis, salpingitis, tubo-ovarian abscess, pelvic peritonitis, periappendicitis, and perihepatitis. A number of other causes may produce similar symptoms including appendicitis, ectopic pregnancy, hemorrhagic or

ruptured ovarian cysts, ovarian torsion, and endometriosis and gastroenteritis, peritonitis, and bacterial vaginosis among others. Pelvic inflammatory disease is more likely to reoccur when there is a prior history of the infection, recent sexual contact, recent onset of menses, or an IUD (intrauterine device) in place or if the partner has a sexually transmitted infection. PID can cause scarring inside the reproductive system, which can later cause serious complications, including chronic pelvic pain, infertility, ectopic pregnancy (the leading cause of pregnancy-related deaths in adult females), and other complications of pregnancy. Occasionally, the infection can spread to in the peritoneum causing inflammation and the formation of scar tissue on the external surface of the liver (Fitz-Hugh–Curtis syndrome).

* Proctocolitis is a general term for inflammation of the rectum and colon. Proctocolitis has many possible causes. Common infectious causes of proctocolitis include Chlamydia trachomatis, LGV (Lymphogranuloma Venereum), Neisseria gonorrhoeae, HSV, and Campylobacter species. It can also be idiopathic (see colitis), vascular (as in ischemic colitis), or autoimmune (as in inflammatory bowel disease).

* Pupillary disorders are conditions which affect the structure or function of the pupil of the eye, including disorders of innervation to the pupillary constrictor or dilator muscles, and disorders of pupillary reflexes.

* Raynaud's disease is excessively reduced blood flow in response to cold or emotional stress, causing discoloration of the fingers, toes, and occasionally other areas. This condition may also cause nails to become brittle with longitudinal ridges. The phenomenon is believed to be the result of vasospasms that decrease blood supply to the respective regions. Its pathophysiology includes hyperactivation of the sympathetic nervous system causing extreme vasoconstriction of the peripheral blood vessels, leading to tissue hypoxia. Chronic, recurrent cases of Raynaud's phenomenon can result in atrophy of the skin, subcutaneous tissues, and muscle. In rare cases it can cause ulceration and ischemic gangrene.

* Renal artery stenosis is the narrowing of one or both of the renal arteries, most often caused by atherosclerosis or fibromuscular dysplasia. This narrowing of the renal artery can impede blood flow to the target kidney, resulting in renovascular hypertension – a secondary type of high blood pressure. Possible complications of renal artery stenosis are chronic kidney disease and coronary artery disease. The pathophysiology of renal artery stenosis, leads to changes in the structure of the kidney that are most noticeable in the tubular tissue. If the stenosis is longstanding and severe the glomerular filtration rate in the affected kidneys never recovers and (prerenal) kidney failure is the result. Most cases of renal artery stenosis are asymptomatic, and the main problem is high blood pressure that cannot be controlled with medication. Decreased kidney function may develop if both kidneys do not receive adequate blood flow, furthermore some people with renal artery stenosis present with episodes of flash pulmonary edema.

* Salmonella infections are caused by Salmonella bacteria. Most people infected with Salmonella develop diarrhea, fever, vomiting, and abdominal cramps 12 to 72 hours

after infection. In most cases, the illness lasts four to seven days, and most people recover without treatment. In some cases, the diarrhea may be so severe that the patient becomes dangerously dehydrated and must be hospitalized. Intravenous fluids may be used to treat dehydration. Medications may be used to provide symptomatic relief, such as fever reduction. In severe cases, the Salmonella infection may spread from the intestines to the blood stream, and then to other body sites; this is known as typhoid fever and is treated with antibiotics. The elderly, infants, and those with impaired immune systems are more likely to develop severe illness. Some people afflicted with salmonellosis later experience reactive arthritis, which can have long-lasting, disabling effects.

* Sicca (Sjogren) syndrome is a long term autoimmune disease in which the moisture-producing glands of the body are affected.This results primarily in the development of a dry mouth and dry eyes. Other symptoms can include dry skin, a chronic cough, vaginal dryness, numbness in the arms and legs, feeling tired, muscle and joint pains, and thyroid problems. Those affected are at an increased risk (5%) of lymphoma. The hallmark symptom of SS is a generalized dryness, typically including xerostomia and keratoconjunctivitis sicca, part of what are known as sicca symptoms. Sicca syndrome also incorporates vaginal dryness and chronic bronchitis. SS may cause skin, nose, and vaginal dryness, and may affect other organs of the body, including the muscles (myositis), kidneys, blood vessels, lungs, liver, biliary system, pancreas, peripheral nervous system (distal axonal sensorimotor neuropathy or small fiber peripheral neuropathy) and brain. Some patients have gastric issues such as GERD, achlorhydria and/or gastroparesis, and chronic pain with accompanying fatigue and brain fog. The symptoms may develop insidiously, with the diagnosis often not considered for several years, because the complaints of sicca may be otherwise attributed to medications, a dry environment, aging, or may be regarded as not of severity warranting the level of investigation necessary to establish the presence of the specific underlying autoimmune disorder condition. SS is associated with a number of other medical conditions, many of which are autoimmune or rheumatic disorders, such as celiac disease, fibromyalgia, autoimmune thyroiditis, multiple sclerosis and spondyloarthropathy, and several malignancies, principally non-Hodgkin lymphoma.

* Testicular torsion occurs when a testicle rotates, twisting the spermatic cord that brings blood to the scrotum. The reduced blood flow causes sudden and often severe pain and swelling. Testicular torsion is most common between ages 12 and 16, but it can occur at any age, even before birth. Testicular torsion usually requires emergency surgery. If treated quickly, the testicle can usually be saved. But when blood flow has been cut off for too long, a testicle might become so badly damaged that it has to be removed. Signs and symptoms of testicular torsion include sudden, severe pain in the scrotum — the loose bag of skin under your penis that contains the testicles, swelling of the scrotum, abdominal pain, nausea and vomiting, a testicle that's positioned higher than normal or at an unusual angle, painful urination and fever. Some men are more prone to this condition because of defects in the connective tissue within the scrotum. The problem may also occur after an injury to the scrotum that results in a lot of swelling, or following heavy exercise. In some cases, there is no clear cause.

* Thalassemias are inherited blood disorders that can result in the abnormal formation of hemoglobin. Symptoms depend on the type and can vary from none to severe. Often there is mild to severe anemia (low red blood cells). Anemia can result in feeling tired and pale skin. There may also be bone problems, an enlarged spleen, yellowish skin, dark urine, and among children slow growth. People with thalassemia can get an overload of iron in their bodies, either from the disease itself or from frequent blood transfusions. Too much iron can result in damage to the heart, liver, and endocrine system, which includes glands that produce hormones that regulate processes throughout the body. People with thalassemia have an increased risk of infection. This is especially true if the spleen has been removed. Thalassemia can make the bone marrow expand, which causes bones to widen. This can result in abnormal bone structure, especially in the face and skull. Bone marrow expansion also makes bones thin and brittle, increasing the risk of broken bones. Thalassemia is often accompanied by the destruction of a large number of red blood cells and the task of removing these cells causes the spleen to enlarge. Splenomegaly can make anemia worse, and it can reduce the life of transfused red blood cells. Severe enlargement of the spleen may necessitate its removal. Anemia can cause a child's growth to slow. Puberty also may be delayed in children with thalassemia. Diseases, such as congestive heart failure and abnormal heart rhythms, may be associated with severe thalassemia.

* Thyroiditis is the inflammation of the thyroid gland. The thyroid gland is located on the front of the neck below the laryngeal prominence, and makes hormones that control metabolism. Thyroiditis is a group of disorders that all cause thyroidal inflammation. Forms of the disease are Hashimoto's thyroiditis, the most common cause of hypothyroidism in the US, postpartum thyroiditis, subacute thyroiditis, silent thyroiditis, drug-induced thyroiditis , radiation-induced thyroiditis, acute thyroiditis, and Riedel's thyroiditis. Each different type of this disease has its own causes, clinical features, diagnoses, durations, resolutions, conditions and risks. Many of the signs imitate symptoms of other diseases, so thyroiditis can sometimes be difficult to diagnose. Common hypothyroid symptoms manifest when thyroid cell damage is slow and chronic, and may include fatigue, weight gain, feeling "fuzzy headed," depression, dry skin, and constipation. Other, rarer symptoms include swelling of the legs, vague aches and pains, decreased concentration and so on. When conditions become more severe, depending on the type of thyroiditis, one may start to see puffiness around the eyes, slowing of the heart rate, a drop in body temperature, or even incipient heart failure. On the other hand, if the thyroid cell damage is acute, the thyroid hormone within the gland leaks out into the bloodstream causing symptoms of thyrotoxicosis, which is similar to those of hyperthyroidism. These symptoms include weight loss, irritability, anxiety, insomnia, fast heart rate, and fatigue. Elevated levels of thyroid hormone in the bloodstream cause both conditions, but thyrotoxicosis is the term used with thyroiditis since the thyroid gland is not overactive, as in the case of hyperthyroidism.

* Urogenital surgical procedures are performed on the urinary tract or its organs and on the male or female genitalia. Although the functions of these organs are completely unrelated, these organs may use common ducts.

* Vitiligo is a long term skin condition characterized by patches of the skin losing their pigment. The patches of skin affected become white and usually have sharp margins. The hair from the skin may also become white. Inside the mouth and nose may also be involved. Typically both sides of the body are affected. Often the patches begin on areas of skin that are exposed to the sun. It is more noticeable in people with dark skin. Vitiligo may result in psychological stress and those affected may be stigmatized.

* Vomiting, also known as emesis and throwing up, among other terms, is the involuntary, forceful expulsion of the contents of one's stomach through the mouth and sometimes the nose. Vomiting can be caused by a wide variety of conditions; it may present as a specific response to ailments like gastritis or poisoning, or as a non-specific sequela of disorders ranging from brain tumors and elevated intracranial pressure to overexposure to ionizing radiation. The feeling that one is about to vomit is called nausea, which often precedes, but does not always lead to, vomiting. Antiemetics are sometimes necessary to suppress nausea and vomiting. In severe cases, where dehydration develops, intravenous fluid may be required. Vomiting is different from regurgitation, although the two terms are often used interchangeably. Regurgitation is the return of undigested food back up the esophagus to the mouth, without the force and displeasure associated with vomiting. The causes of vomiting and regurgitation are generally different.

* Yersinia is a genus of bacteria in the family Enterobacteriaceae. Yersinia species are Gram-negative, rod-shaped bacteria, a few micrometers long and fractions of a micrometer in diameter, and are facultative anaerobes. Some members of Yersinia are pathogenic in humans; in particular, Y. pestis is the causative agent of the plague. Rodents are the natural reservoirs of Yersinia; less frequently, other mammals serve as the host. Infection may occur either through blood (in the case of Y. pestis) or in an alimentary fashion, occasionally via consumption of food products (especially vegetables, milk-derived products, and meat) contaminated with infected urine or feces. Infection with Y. enterocolitica can cause a variety of symptoms depending on the age of the person infected. Common symptoms in children are fever, abdominal pain, and diarrhea, which is often bloody. Symptoms typically develop 4 to 7 days after exposure and may last 1 to 3 weeks or longer. In older children and adults, right-sided abdominal pain and fever may be the predominant symptoms, and may be confused with appendicitis. In a small proportion of cases, complications such as skin rash, joint pains, ileitis, erythema nodosum, and sometimes septicemia, acute arthritis or the spread of bacteria to the bloodstream (bacteremia) can occur.

1.1.19 RTS-11

https://archive.org/details/Resonant_Therapy_Sessions_11

Acute Inflammatory Neuropathy, Anemia, Arthritis Reactive, Asthma Plus Allegies

Comprehensive, Astigmatism, Bird Flu H5N1, Brain Abscess, Brain Ischemia, Bronchiectasis, Cancer-Ear, Cancer-Endocrine, Cancer-Eye, Cancer-Head And Neck, Cancer-Intestinal, Cancer-Tonsillar, Cancer-Trophoblastic, Candidiasis Vulvovaginal, Carcinoid Tumor, Carcinoma, Chondritis Costal, Diplopia, Eye Hemorrhage, Gallbladder Inflammation, Glioma, Gonorrhea, Gyrate Atrophy, Head Trauma, Heart Disease Plus COPD Comprehensive, Heart Septal Defects, Heart Valve Diseases, Hemophilia Vascular, Hepatitis Chronic, Hepatitis Viral, Herpes Simplex 2, Herpetic Facial Paralysis, Hypoxia, Laryngeal Diseases, Laryngomalacia, Meconium Aspiration, Methemoglobinemia, Myocardial Infarction, Nephrosis, Nephrotic Syndrome, Osteopetrosis, Pancreatic Insufficiency, Pancreatitis, Polycystic Kidney Diseases, Protozoan Infections, Rheumatic Fever, Spina Bifida, Tracheal Stenosis, Tracheoesophageal Fistula, Varices, Venereal Diseases-Bacterial, Ventricular Fibrillation, Virus Comprehensive, Vitamin A Deficiency, Vulvar Lichen Sclerosus, Whipworm Infections, Zoonoses

* Acute Inflammatory Neuropathy orInflammatory neuropathies like Guillain-Barré syndrome (GBS), chronic inflammatory demyelinating polyradiculoneuropathy (CIDP), and related neuropathies, are thought to be caused by direct autoimmune attack on peripheral nerves. Features that suggest that a neuropathy is likely to be inflammatory include loss of reflexes without muscle wasting, elevated cerebrospinal fluid (CSF) protein, positive sensory symptoms such as pain or tingling, asymmetry, and proximal weakness. Nerve conduction studies show features of demyelination, especially motor nerve conduction block and temporal dispersion. Inflammatory neuropathy has been arbitrarily classified according to the time from symptom onset until maximal severity, where “acute” is less than four weeks and “chronic” is more than eight weeks, with a rare intermediate “subacute” group.

* Anemia is usually defined as a decrease in the amount of red blood cells (RBCs) or hemoglobin in the blood. It can also be defined as a lowered ability of the blood to carry oxygen. When anemia comes on slowly, the symptoms are often vague and may include: feeling tired, weakness, shortness of breath or a poor ability to exercise. Anemia that comes on quickly often has greater symptoms, which may include: confusion, feeling like one is going to pass out, loss of consciousness, or increased thirst. Anemia must be significant before a person becomes noticeably pale. Additional symptoms may occur depending on the underlying cause. It is more common in females than males, among children, during pregnancy, and in the elderly. Anemia goes undetected in many people and symptoms can be minor. The symptoms can be related to an underlying cause or the anemia itself. Most commonly, people with anemia report feelings of weakness, or fatigue, general malaise, and sometimes poor concentration. They may also report dyspnea (shortness of breath) on exertion. In very severe anemia, the body may compensate for the lack of oxygen-carrying capability of the blood by increasing cardiac output.

* Arthritis reactive is classified as an autoimmune condition that develops in response to

an infection in another part of the body (cross-reactivity). Coming into contact with bacteria and developing an infection can trigger the disease. The manifestations of reactive arthritis include the following triad of symptoms: an inflammatory arthritis of large joints, inflammation of the eyes in the form of conjunctivitis or uveitis, and urethritis in men or cervicitis in women. Arthritis occurring alone following sexual exposure or enteric infection is also known as reactive arthritis. Patients can also present with mucocutaneous lesions, as well as psoriasis-like skin lesions such as circinate balanitis, and keratoderma blennorrhagicum. Enthesitis can involve the Achilles tendon resulting in heel pain. Not all affected persons have all the manifestations. The clinical pattern of reactive arthritis commonly consists of an inflammation of fewer than five joints which often includes the knee or sacroiliac joint. The arthritis may be "additive" (more joints become inflamed in addition to the primarily affected one) or "migratory" (new joints become inflamed after the initially inflamed site has already improved).

* Asthma plus allergies comprehensive.

* Astigmatism is a type of refractive error in which the eye does not focus light evenly on the retina. This results in distorted or blurred vision at all distances. Other symptoms can include eyestrain, headaches, and trouble driving at night. If it occurs early in life it can result in amblyopia. Although astigmatism may be asymptomatic, higher degrees of an astigmatism may cause symptoms such as blurry vision, squinting, eye strain, fatigue, or headaches. Some research has pointed to the link between astigmatism and higher prevalence of migraine headaches.

* Influenza A virus subtype H5N1, also known as A(H5N1) or simply H5N1, is a subtype of the influenza A virus which can cause illness in humans and many other animal species. A bird-adapted strain of H5N1, called HPAI A(H5N1) for highly pathogenic avian influenza virus of type A of subtype H5N1, is the highly pathogenic causative agent of H5N1 flu, commonly known as avian influenza ("bird flu"). In general, humans who catch a humanized influenza A virus (a human flu virus of type A) usually have symptoms that include fever, cough, sore throat, muscle aches, conjunctivitis, and, in severe cases, breathing problems and pneumonia that may be fatal. The severity of the infection depends in large part on the state of the infected persons' immune systems and whether they had been exposed to the strain before (in which case they would be partially immune). No one knows if these or other symptoms will be the symptoms of a humanized H5N1 flu. H5N1 is a subtype of the species Influenza A virus of the Influenzavirus A genus of the Orthomyxoviridae family. Like all other influenza A subtypes, the H5N1 subtype is a RNA virus.

* Brain abscess (or cerebral abscess) is an abscess caused by inflammation and collection of infected material, coming from local (ear infection, dental abscess, infection of paranasal sinuses, infection of the mastoid air cells of the temporal bone, epidural abscess) or remote (lung, heart, kidney etc.) infectious sources, within the brain tissue. The infection may also be introduced through a skull fracture following a head trauma or surgical procedures. Brain abscess is usually associated with congenital heart disease in young children. It may occur at any age but is most frequent in the third decade of

life. The symptoms of brain abscess are caused by a combination of increased intracranial pressure due to a space-occupying lesion (headache, vomiting, confusion, coma), infection (fever, fatigue etc.) and focal neurologic brain tissue damage (hemiparesis, aphasia etc.). The most frequent presenting symptoms are headache, drowsiness, confusion, seizures, hemiparesis or speech difficulties together with fever with a rapidly progressive course. The symptoms and findings depend largely on the specific location of the abscess in the brain.

* Brain ischemia is a condition in which there is insufficient blood flow to the brain to meet metabolic demand. This leads to poor oxygen supply or cerebral hypoxia and thus to the death of brain tissue or cerebral infarction / ischemic stroke. It is a sub-type of stroke along with subarachnoid hemorrhage and intracerebral hemorrhage. Ischemia leads to alterations in brain metabolism, reduction in metabolic rates, and energy crisis. There are two types of ischemia: focal ischemia, which is confined to a specific region of the brain; and global ischemia, which encompasses wide areas of brain tissue. The main symptoms involve impairments in vision, body movement, and speaking. The causes of brain ischemia vary from sickle cell anemia to congenital heart defects. Symptoms of brain ischemia can include unconsciousness, blindness, problems with coordination, and weakness in the body. Other effects that may result from brain ischemia are stroke, cardiorespiratory arrest, and irreversible brain damage. An interruption of blood flow to the brain for more than 10 seconds causes unconsciousness, and an interruption in flow for more than a few minutes generally results in irreversible brain damage.

* Bronchiectasis is a disease in which there is permanent enlargement of parts of the airways of the lung. Symptoms typically include a chronic cough productive of mucus. Other symptoms include shortness of breath, coughing up blood, and chest pain. Wheezing and nail clubbing may also occur. Those with the disease often get frequent lung infections. Bronchiectasis may result from a number of infective and acquired causes, including pneumonia, tuberculosis, immune system problems, and cystic fibrosis. Cystic fibrosis eventually results in severe bronchiectasis in nearly all cases. The cause in 10-50% of those without cystic fibrosis is unknown. The mechanism of disease is breakdown of the airways due to an excessive inflammatory response. Involved bronchi become enlarged and thus less able to clear secretions. These secretions increase the amount of bacteria in the lungs, result in airway blockage and further breakdown of the airways. It is classified as an obstructive lung disease, along with chronic obstructive pulmonary disease and asthma.

* Candidal vulvovaginitis is excessive growth of yeast in the vagina that results in irritation. The most common symptom is vaginal itching, which may be severe. Other symptoms include burning with urination, white and thick vaginal discharge that typically does not smell bad, pain with sex, and redness around the vagina. Symptoms often worsen just before a woman's period. Vaginal yeast infections are due to excessive growth of Candida. These yeast are normally present in the vagina in small numbers. It is not classified as a sexually transmitted infection; however, it may occur more often in those who are frequently sexually active. Risk factors include taking antibiotics,

pregnancy, diabetes, and HIV/AIDS. The symptoms include vulval itching, vulval soreness and irritation, pain or discomfort during sexual intercourse (superficial dyspareunia), pain or discomfort during urination (dysuria) and vaginal discharge, which is usually odourless. This can be thin and watery, or thick and white, like cottage cheese. As well as the above symptoms vulvovaginal inflammation can also be present. The signs of vulvovaginal inflammation include erythema (redness) of the vagina and vulva, vaginal fissuring (cracked skin), edema (swelling from a build-up of fluid), also in severe cases, satellite lesions (sores in the surrounding area). This is rare, but may indicate the presence of another fungal condition, or the herpes simplex virus (the virus that causes genital herpes).

* Carcinoid (also carcinoid tumor) is a slow-growing type of neuroendocrine tumor originating in the cells of the neuroendocrine system. In some cases, metastasis may occur. Carcinoid tumors of the midgut (jejunum, ileum, appendix, and cecum) are associated with carcinoid syndrome. While most carcinoids are asymptomatic through the natural lifetime, all carcinoids are considered to have malignant potential. While most carcinoids are asymptomatic through the natural lifetime and are discovered only upon surgery for unrelated reasons (so-called coincidental carcinoids), all carcinoids are considered to have malignant potential. About 10% of carcinoids secrete excessive levels of a range of hormones, most notably serotonin (5-HT), causing: Flushing (serotonin itself does not cause flushing), potential causes of flushing in carcinoid syndrome include bradykinins, prostaglandins, tachykinins, substance P, and/or histamine, diarrhea, and heart problems. Because of serotonin's growth-promoting effect on cardiac myocytes, a serotonin-secreting carcinoid tumour may cause a tricuspid valve disease syndrome, due to the proliferation of myocytes onto the valve. Diarrhea, wheezing, abdominal cramping, peripheral edema. The outflow of serotonin can cause a depletion of tryptophan leading to niacin deficiency. Niacin deficiency, also known as pellagra, is associated with dermatitis, dementia, and diarrhea. Occasionally, haemorrhage or the effects of tumor bulk are the presenting symptoms. The most common originating sites of carcinoid is the small bowel, particularly the ileum; carcinoid tumors are the most common malignancy of the appendix. Carcinoid tumors may rarely arise from the ovary or thymus. They are most commonly found in the midgut at the level of the ileum or in the appendix. The next most common affected area is the respiratory tract, with 28% of all cases. The rectum is also a common site.

* Carcinoma is a type of cancer that develops from epithelial cells. Specifically, a carcinoma is a cancer that begins in a tissue that lines the inner or outer surfaces of the body, and that generally arises from cells originating in the endodermal or ectodermal germ layer during embryogenesis. The term carcinoma has also come to encompass malignant tumors composed of transformed cells whose origin or developmental lineage is unknown, but that possess certain specific molecular, cellular, and histological characteristics typical of epithelial cells. Carcinomas occur when the DNA of a cell is damaged or altered and the cell begins to grow uncontrollably and become malignant.

* Chondritis costal is an acute and often temporary inflammation of the costal cartilage, the structure that connects each rib to the sternum at the costosternal joint. The

condition is a common cause of chest pain. Though costochondritis often resolves on its own, it can be a recurring condition that has little or no signs of onset. Costochondritis symptoms can be similar to the chest pain associated with a heart attack. Unexplained chest pain is considered a medical emergency until life-threatening cardiac issues can be ruled out. Severe cases of costal cartilage inflammation that also involve painful swelling are sometimes referred to as Tietze's syndrome, a term sometimes used interchangeably with costochondritis. However, some physicians view costochondritis and Tietze's syndrome as separate disease states due to the absence of costal cartilage swelling in costochondritis.

* Diplopia, commonly known as double vision, is the simultaneous perception of two images of a single object that may be displaced horizontally, vertically, diagonally (i.e., both vertically and horizontally), or rotationally in relation to each other. It is usually the result of impaired function of the extraocular muscles (EOMs), where both eyes are still functional but they cannot converge to target the desired object. Problems with EOMs may be due to mechanical problems, disorders of the neuromuscular junction, disorders of the cranial nerves (III, IV, and VI) that stimulate the muscles, and occasionally disorders involving the supranuclear oculomotor pathways or ingestion of toxins. Diplopia can be one of the first signs of a systemic disease, particularly to a muscular or neurological process, and it may disrupt a person’s balance, movement, and/or reading abilities.

* Eye hemorrhage is bleeding underneath the conjunctiva. The conjunctiva contains many small, fragile blood vessels that are easily ruptured or broken. When this happens, blood leaks into the space between the conjunctiva and sclera. Such a hemorrhage may be caused by a sudden or severe sneeze or cough, or due to hypertension or as a side effect of blood thinners. It may also be caused by heavy lifting, vomiting, or even rubbing one's eyes too roughly. In other cases, it may result from being choked or from straining due to constipation. Also, it can result as a minor post-operative complication in eye surgeries such as LASIK. Whereas a bruise typically appears black or blue underneath the skin, a subconjunctival hemorrhage initially appears bright-red underneath the transparent conjunctiva. Later, the hemorrhage may spread and become green or yellow, like a bruise. Usually this disappears within 2 weeks. Although its appearance may be alarming, in general a subconjunctival hemorrhage is a painless and harmless condition; however, it may be associated with high blood pressure, trauma to the eye, or a base of skull fracture if there is no posterior border of the hemorrhage visible.

* Gallbladder inflammation or cholecystitis symptoms include right upper abdominal pain, nausea, vomiting, and occasionally fever. Often acute cholecytitis is proceeded by gallbladder attacks. The pain, however, lasts longer than is typical in a gallbladder attack. Without appropriate treatment recurrent episodes of cholecystitis are common. Acute cholecystitis may be complicated by gallstone pancreatitis, common bile duct stones, or inflammation of the common bile duct. More than 90% of the time acute cholecystitis is from blockage of the bile duct by a gallstone. Risk factors for gallstones include birth control pills, pregnancy, a family history of gallstones, obesity, diabetes,

liver disease, or rapid weight loss. Occasionally acute cholecystitis occur as a result of vasculitis, chemotherapy, or during recovery from major trauma or burns. Most people with gallstones do not have symptoms. When a gallstone becomes intermittently lodged in the cystic duct, they suffer from biliary colic. Biliary colic is abdominal pain in the right upper quadrant or epigastrium that is usually episodic, occurs after eating greasy or fatty foods, and leads to nausea and/or vomiting. People who suffer from cholecystitis most commonly initially have symptoms of biliary colic before developing cholecystitis. The symptoms of cholecystitis are similar to biliary colic but the pain becomes more severe and constant. Nausea is common and vomiting occurs in 75% of people with cholecystitis. In addition to abdominal pain, right shoulder pain can be present. On physical examination, fever is common. A gallbladder with cholecystitis is almost always tender to touch. Because of the inflammation, its size can be felt from the outside of the body in 25-50% of people with cholecystitis. Pain with deep inspiration leading to termination of the breath while pressing on the right upper quadrant of the abdomen usually causes pain (Murphy's sign). Murphy's sign is sensitive, but not specific for cholecystitis. Jaundice may occur but is usually mild, and if severe, suggests another cause of symptoms such as choledocholithiasis. Elderly patients and those with diabetes, chronic illness, or who are immunocompromised may have vague symptoms that may not include fever or localized tenderness.

* Glioma is a type of tumor that starts in the brain or spine. It is called a glioma because it arises from glial cells. The most common site of gliomas is the brain. Gliomas make up about 30% of all brain and central nervous system tumors and 80% of all malignant brain tumors. Symptoms of gliomas depend on which part of the central nervous system is affected. A brain glioma can cause headaches, vomiting, seizures, and cranial nerve disorders as a result of increased intracranial pressure. A glioma of the optic nerve can cause visual loss. Spinal cord gliomas can cause pain, weakness, or numbness in the extremities. Gliomas do not metastasize by the bloodstream, but they can spread via the cerebrospinal fluid and cause "drop metastases" to the spinal cord.

* Gonorrhea, also spelled gonorrhoea, is a sexually transmitted infection caused by the bacterium Neisseria gonorrhoeae. Many people have no symptoms. Men may have burning with urination, discharge from the penis, or testicular pain. Women may have burning with urination, vaginal discharge, vaginal bleeding between periods, or pelvic pain. Complications in women include pelvic inflammatory disease and in men include inflammation of the epididymis. If untreated gonorrhea can occasionally spread to affect joints or heart valves. Gonorrhea is spread through sexual contact with an infected person. This includes oral, anal, and vaginal sex. It can also spread from a mother to a child during birth. Half of women with gonorrhea do not have symptoms, whereas others have vaginal discharge, lower abdominal pain, or pain with sexual intercourse associated with inflammation of the uterine cervix. Most infected men with symptoms have inflammation of the penile urethra associated with a burning sensation during urination and discharge from the penis. In men, discharge with or without burning occurs in half of all cases and is the most common symptom of the infection.

* Gyrate atrophy of the choroid and retina is an inborn error of ornithine metabolism,

caused by decreased activity of the enzyme ornithine aminotransferase. Clinically, it presents initially with poor night vision, which slowly progresses to total blindness. It is believed to be inherited in an autosomal recessive manner. Quite often, the presenting symptom of ornithine aminotransferase (OAT) deficiency is myopia which progresses to night blindness. The onset of myopia is often in early childhood. Ophthalmological findings in affected individuals include constricted visual fields, posterior subcapsular cataracts (can begin in late teens), elevated dark adaptation thresholds and decreased or absent electroretinographic responses. Symptoms of OAT deficiency are progressive, and between the ages of 45 and 65, most affected individuals are almost completely blind. In some cases, affected individuals will present in the neonatal period with disease that closely mimics a classic urea cycle defect, such as ornithine transcarbamylase deficiency, as the block in ornithine metabolism leads to secondary dysfunction of the urea cycle. These individuals present with hyperammonemia, poor feeding, failure to thrive and increased excretion of orotic acid.

* Head trauma's classification includes neuronal injuries, hemorrhages, vascular injuries, cranial nerve injuries, and subdural hygromas, among many others. This classification can be further categorized as open (penetrating) or closed head injuries. This depends on if the skull was broken or not. Because head injuries cover such a broad scope of injuries, there are many causes—including accidents, falls, physical assault, or traffic accidents—that can cause head injuries. Unlike a broken bone where trauma to the body is obvious, head trauma can sometimes be conspicuous or inconspicuous. In the case of an open head injury, the skull is cracked and broken by an object that makes contact with the brain. This leads to bleeding. Other obvious symptoms can be neurological in nature. The person may become sleepy, behave abnormally, lose consciousness, vomit, develop a severe headache, have mismatched pupil sizes, and/or be unable to move certain parts of the body.

* Heart septal defect refers to a congenital heart defect of one of the septa of the heart, such as Atrial septal defect, Atrioventricular septal defect, and Ventricular septal defect. Although aortopulmonary septal defects are defects of the aorticopulmonary septum, which is not technically part of the heart, they are sometimes grouped with the heart septal defects.

* Valvular heart disease is any disease process involving one or more of the four valves of the heart (the aortic and mitral valves on the left and the pulmonary and tricuspid valves on the right). These conditions occur largely as a result of aging. Most people are in their late 50s when diagnosed, and more than one in ten people over 75 have it. Collectively and anatomically, the valves are part of the dense connective tissue makeup of the heart known as the cardiac skeleton. Valve problems may be congenital (inborn) or acquired (due to another cause later in life). Specific situations include those where additional demands are made on the circulation, such as in pregnancy.

* Hemophilia vascular or Von Willebrand disease (vWD) is the most common hereditary blood-clotting disorder in humans. An acquired form can sometimes result from other medical conditions. It arises from a deficiency in the quality or quantity of von Willebrand

factor (vWF), a multimeric protein that is required for platelet adhesion. vWD type 1 is the most common type of the disorder which is typically asymptomatic, though mild symptoms such as nosebleeds may occur, and occasionally more severe symptoms. Blood type can affect the presentation and severity of symptoms of vWD. The various types of vWD present with varying degrees of bleeding tendency, usually in the form of easy bruising, nosebleeds, and bleeding gums. Women may experience heavy menstrual periods and blood loss during childbirth. Severe internal bleeding and bleeding into joints are uncommon in all but the most severe type, vWD type 3. Von Willebrand factor is mainly active in conditions of high blood flow and shear stress. Deficiency of vWF, therefore, shows primarily in organs with extensive small vessels, such as skin, gastrointestinal tract, and uterus. In angiodysplasia, a form of telangiectasia of the colon, shear stress is much higher than in average capillaries, and the risk of bleeding is increased concomitantly.

* Chronic or autoimmune hepatitis is a chronic, autoimmune disease of the liver that occurs when the body's immune system attacks liver cells causing the liver to be inflamed. Common initial symptoms include fatigue or muscle aches or signs of acute liver inflammation including fever, jaundice, and right upper quadrant abdominal pain. Individuals with autoimmune hepatitis often have no initial symptoms and the disease is detected by abnormal liver function tests. Anomalous presentation of human leukocyte antigen (HLA) class II on the surface of liver cells, possibly due to genetic predisposition or acute liver infection, causes a cell-mediated immune response against the body's own liver, resulting in autoimmune hepatitis. This abnormal immune response results in inflammation of the liver, which can lead to further symptoms and complications such as fatigue and cirrhosis. The disease may occur in any ethnic group and at any age, but is most often diagnosed in patients between age 40 and 50. Though there is a strong female predominance, men are also at risk for the disease. Patients may present with signs of chronic liver disease (abnormal liver function tests, fatigue, aches) or acute hepatitis (fever, jaundice, right upper quadrant abdominal pain). Autoimmune hepatitis usually occurs in women (70 %) between the ages of 15 and 40. Although the term "lupoid" hepatitis was originally used to describe this disease, patients with systemic lupus erythematosus do not have an increased incidence of autoimmune hepatitis and the two diseases are distinct entities. Patients usually present with evidence of moderate to severe hepatitis with elevated serum ALT and AST activities in the setting of normal to marginally elevated alkaline phosphatase and gamma-glutamyltranspeptidase activities. The patient will sometimes present with jaundice, fever and right upper quadrant pain and occasionally systemic symptoms such as arthralgias, myalgias, polyserositis and thrombocytopenia. Some patients will present with mild liver dysfunction and have only laboratory abnormalities as their initial presentation. Others will present with severe hepatic dysfunction.

* Hepatitis viral is liver inflammation due to a viral infection. It may present in acute (recent infection, relatively rapid onset) or chronic forms. The most common causes of viral hepatitis are the five unrelated hepatotropic viruses Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, and Hepatitis E. In addition to the nominal hepatitis viruses, other viruses that can also cause liver inflammation include Cytomegalovirus, Epstein–

Barr virus, and Yellow fever. Up to 1997 there has been also 52 cases of Viral hepatitis caused by Herpes simplex virus.

* Herpes simplex is a viral disease caused by the herpes simplex virus. Of the two types of herpes simplex virus, type 2 (HSV-2) more commonly causes genital infections. HSV-2 may cause primarily anogenital infections, however, it may cause infections in all areas. HSV infection causes several distinct medical disorders. Common infection of the skin or mucosa may affect the face and mouth (orofacial herpes), genitalia (genital herpes), or hands (herpetic whitlow). More serious disorders occur when the virus infects and damages the eye (herpes keratitis), or invades the central nervous system, damaging the brain (herpes encephalitis). People with immature or suppressed immune systems, such as newborns, transplant recipients, or people with AIDS, are prone to severe complications from HSV infections. Many people infected with HSV-2 display no physical symptoms—individuals with no symptoms are described as asymptomatic or as having subclinical herpes. However, asymptomatic carriers of the HSV-2 virus are still contagious. In many infections, the first symptom people will have of their own infections is the horizontal transmission to a sexual partner or the vertical transmission of neonatal herpes to a newborn at term. Since most asymptomatic individuals are unaware of their infection, they are considered at high risk for spreading HSV. As with almost all sexually transmitted infections, women are more susceptible to acquiring genital HSV-2 than men. Previous HSV-1 infection appears to reduce the risk for acquisition of HSV-2 infection among women by a factor of three. Following active infection, herpes viruses establish a latent infection in sensory and autonomic ganglia of the nervous system. The double-stranded DNA of the virus is incorporated into the cell physiology by infection of the nucleus of a nerve's cell body. HSV latency is static; no virus is produced; and is controlled by a number of viral genes. The frequency and severity of recurrent outbreaks vary greatly between people. Some individuals' outbreaks can be quite debilitating, with large, painful lesions persisting for several weeks, while others experience only minor itching or burning for a few days. HSV-2-infected individuals are at higher risk for acquiring HIV when practicing unprotected sex with HIV-positive persons, in particular during an outbreak with active lesions.

* Herpetic facial paralysis (also Bell's palsy) is a type of facial paralysis that results in an inability to control the facial muscles on the affected side. Symptoms can vary from mild to severe. They may include muscle twitching, weakness, or total loss of the ability to move one or rarely both sides of the face. Other symptoms include drooping of the eyelid, a change in taste, pain around the ear, and increased sensitivity to sound. Typically symptoms come on over 48 hours. Bell's palsy is characterized by a one-sided facial droop that comes on within 72 hours. In rare cases (<1%), it can occur on both sides resulting in total facial paralysis. The facial nerve controls a number of functions, such as blinking and closing the eyes, smiling, frowning, lacrimation, salivation, flaring nostrils and raising eyebrows. It also carries taste sensations from the anterior two-thirds of the tongue, via the chorda tympani nerve (a branch of the facial nerve). Because of this, people with Bell's palsy may present with loss of taste sensation in the anterior 2/3 of the tongue on the affected side. Although the facial nerve innervates the stapedial muscles of the middle ear (via the tympanic branch), sound sensitivity and

dysacusis are hardly ever clinically evident. Although defined as a mononeuritis (involving only one nerve), people diagnosed with Bell's palsy may have myriad neurological symptoms including facial tingling, moderate or severe headache/neck pain, memory problems, balance problems, ipsilateral limb paresthesias, ipsilateral limb weakness, and a sense of clumsiness that are unexplained by facial nerve dysfunction.

* Hypoxia is a condition in which the body or a region of the body is deprived of adequate oxygen supply at the tissue level. Hypoxia may be classified as either generalized, affecting the whole body, or local, affecting a region of the body. Although hypoxia is often a pathological condition, variations in arterial oxygen concentrations can be part of the normal physiology, for example, during hypoventilation training or strenuous physical exercise. Generalized hypoxia occurs in healthy people when they ascend to high altitude, where it causes altitude sickness leading to potentially fatal complications: high altitude pulmonary edema (HAPE) and high altitude cerebral edema (HACE). Hypoxia also occurs in healthy individuals when breathing mixtures of gases with a low oxygen content, e.g. while diving underwater especially when using closed-circuit rebreather systems that control the amount of oxygen in the supplied air. Hypoxia is also a serious consequence of preterm birth in the neonate. The main cause for this is that the lungs of the human fetus are among the last organs to develop during pregnancy.

* Laryngeal diseases may be caused by vocal abuse, misuse, and overuse: Several disorders of the larynx can be caused by strain or injury to the vocal cords through excessive talking, throat clearing, coughing, smoking, screaming, singing, or speaking too loudly or too low. Eventually, frequent vocal abuse and misuse can cause permanent changes in vocal function and possibly the loss of voice. Almost every disorder of the larynx may result in more than one symptom, and there is no single symptom associated with a specific disorder of the larynx. For example, hoarseness, limitations in pitch and loudness, shortness of breath or increased vocal effort may be a sign of any number of disorders of the larynx.

* Laryngomalacia (literally, "soft larynx") is the most common cause of stridor in infancy, in which the soft, immature cartilage of the upper larynx collapses inward during inhalation, causing airway obstruction. It can also be seen in older patients, especially those with neuromuscular conditions resulting in weakness of the muscles of the throat. However, the infantile form is much more common. Laryngomalacia results in partial airway obstruction, most commonly causing a characteristic high-pitched squeaking noise on inhalation (inspiratory stridor). Some infants have feeding difficulties related to this problem. Rarely, children will have significant life-threatening airway obstruction. The vast majority, however, will only have stridor without other more serious symptoms such as dyspnea (difficulty breathing).

* Meconium aspiration syndrome (MAS) also known as neonatal aspiration of meconium is a medical condition affecting newborn infants. It occurs when meconium is present in their lungs during or before delivery. Meconium is the first stool of an infant, composed of materials ingested during the time the infant spends in the uterus.

Meconium is normally stored in the infant's intestines until after birth, but sometimes (often in response to fetal distress and hypoxia) it is expelled into the amniotic fluid prior to birth, or during labor. If the baby then inhales the contaminated fluid, respiratory problems may occur. After birth, rapid or labored breathing, cyanosis, slow heartbeat, a barrel-shaped chest or low Apgar score are all signs of the syndrome.

* Methemoglobinemia (or methaemoglobinaemia) is a disorder characterized by the presence of a higher than normal level of methemoglobin (metHb, i.e., ferric [Fe3+] rather than ferrous [Fe2+] haemoglobin) in the blood. Methemoglobin is a form of hemoglobin that contains ferric [Fe3+] iron and has a decreased ability to bind oxygen. However, the ferrous iron has an increased affinity for bound oxygen. The binding of oxygen to methemoglobin results in an increased affinity of oxygen to the three other heme sites (that are still ferrous) within the same tetrameric hemoglobin unit. This leads to an overall reduced ability of the red blood cell to release oxygen to tissues, with the associated oxygen–hemoglobin dissociation curve therefore shifted to the left. When methemoglobin concentration is elevated in red blood cells, tissue hypoxia can occur. Signs and symptoms of methemoglobinemia (methemoglobin level above 1%) include shortness of breath, cyanosis, mental status changes (~50%), headache, fatigue, exercise intolerance, dizziness and loss of hairlines. Patients with severe methemoglobinemia (methemoglobin level above 50%) may exhibit seizures, coma and death (>70%). Healthy people may not have many symptoms with methemoglobin levels below 15%. However, patients with co-morbidities such as anemia, cardiovascular disease, lung disease, sepsis, or presence of other abnormal hemoglobin species (e.g. carboxyhemoglobin, sulfhemoglobin or sickle hemoglobin) may experience moderate to severe symptoms at much lower levels (as low as 5–8%).

* Myocardial infarction (MI)) commonly known as a heart attack, occurs when blood flow stops to a part of the heart causing damage to the heart muscle. The most common symptom is chest pain or discomfort which may travel into the shoulder, arm, back, neck, or jaw. Often it is in the center or left side of the chest and lasts for more than a few minutes. The discomfort may occasionally feel like heartburn. Other symptoms may include shortness of breath, nausea, feeling faint, a cold sweat, or feeling tired. About 30% of people have atypical symptoms, with women more likely than men to present atypically. Among those over 75 years old, about 5% have had an MI with little or no history of symptoms. An MI may cause heart failure, an irregular heartbeat, or cardiac arrest. Most MIs occur due to coronary artery disease. Risk factors include high blood pressure, smoking, diabetes, lack of exercise, obesity, high blood cholesterol, poor diet, and excessive alcohol intake, among others. The mechanism of an MI often involves the complete blockage of a coronary artery caused by a rupture of an atherosclerotic plaque. MIs are less commonly caused by coronary artery spasms, which may be due to cocaine, significant emotional stress, and extreme cold, among others.

* Nephrosis is any of various forms of kidney disease (nephropathy). In an old and broad sense of the term, it is any nephropathy, but in current usage the term is usually restricted to a narrower sense of nephropathy without inflammation or neoplasia, in which sense it is distinguished from nephritis, which involves inflammation. It is also

defined as any purely degenerative disease of the renal tubules. Nephrosis is characterized by a set of signs called the nephrotic syndrome. Nephrosis can be a primary disorder or can be secondary to another disorder. Nephrotic complications of another disorder can coexist with nephritic complications. In other words, nephrosis and nephritis can be pathophysiologically contradistinguished, but that does not mean that they cannot occur simultaneously.

* Nephrotic syndrome is a syndrome comprising signs of nephrosis, chiefly proteinuria, hypoalbuminemia, and edema. It is a component of glomerulonephrosis, in which different degrees of proteinuria occur. Essentially, loss of protein through the kidneys (proteinuria) leads to low protein levels in the blood (hypoproteinemia including hypoalbuminemia), which causes water to be drawn into soft tissues (edema). Very low hypoalbuminemia can also cause a variety of secondary problems, such as water in the abdominal cavity (ascites), around the heart or lung (pericardial effusion, pleural effusion), high cholesterol (hence hyperlipidemia), loss of molecules regulating coagulation (hence increased risk of thrombosis).

* Osteopetrosis, literally "stone bone", also known as marble bone disease and Albers-Schönberg disease, is an extremely rare inherited disorder whereby the bones harden, becoming denser, in contrast to more prevalent conditions like osteoporosis, in which the bones become less dense and more brittle, or osteomalacia, in which the bones soften. Osteopetrosis can cause bones to dissolve and break. It can cause osteosclerosis. The cause of the disease is understood to be malfunctioning osteoclasts. Radiological findings will show a bone-in-bone appearance. Despite this excess bone formation, people with osteopetrosis tend to have bones that are more brittle than normal. Mild osteopetrosis may cause no symptoms, and present no problems. However, serious forms can result in stunted growth, deformity, and increased likelihood of fractures; also, patients suffer anemia, recurrent infections, and hepatosplenomegaly due to bone expansion leading to bone marrow narrowing and extramedullary hematopoiesis. It can also result in blindness, facial paralysis, and deafness, due to the increased pressure put on the nerves by the extra bone.

* Pancreatic insufficiency is the inability to properly digest food due to a lack of digestive enzymes made by the pancreas. Pancreatic insufficiency is found in humans afflicted with cystic fibrosis and Shwachman-Diamond Syndrome, and is common in dogs. It is caused by a progressive loss of the pancreatic cells that make digestive enzymes; loss of digestive enzymes leads to maldigestion and malabsorption of nutrients from normal digestive processes. Loss of Pancreatic enzymes leads to maldigestions and malabsorption which may lead to: Steatorrhea, weight loss, fatigue, flatulence and abdominal distention(bacterial fermentation of unabsorbed food), edema (hypoalbuminemia), anemia (B-12, Iron, folic acid deficiency), bleeding disorders (vitamin K malabsorption), Metabolic bone disease (Vitamin D deficiency), neurologic manifestation, and hypocalcemia.

* Pancreatitis is inflammation of the pancreas. The pancreas is a large organ behind the stomach that produces digestive enzymes. There are two main types, acute pancreatitis

and chronic pancreatitis. Signs and symptoms of pancreatitis include pain in the upper abdomen, nausea and vomiting. The pain often goes into the back and is usually severe. In acute pancreatitis a fever may occur and symptoms typically resolve in a few days. In chronic pancreatitis weight loss, fatty stool, and diarrhea may occur. Complications may include infection, bleeding, diabetes mellitus, or problems with other organs. The most common symptoms of pancreatitis are severe upper abdominal or left upper quadrant burning pain radiating to the back, nausea, and vomiting that is worse with eating. Blood pressure may be elevated by pain or decreased by dehydration or bleeding. Heart and respiratory rates are often elevated. The abdomen is usually tender but to a lesser degree than the pain itself. As is common in abdominal disease, bowel sounds may be reduced from reflex bowel paralysis. Fever or jaundice may be present. Chronic pancreatitis can lead to diabetes or pancreatic cancer. Unexplained weight loss may occur from a lack of pancreatic enzymes hindering digestion.

* Polycystic kidney disease is a genetic disorder in which abnormal cysts develop and grow in the kidneys. Cystic disorders can express themselves at any point, infancy, childhood, or adulthood. The disease occurs in humans and some other animals. PKD is characterized by the presence of multiple cysts (hence, "polycystic") typically in both kidneys; however, 17% of cases initially present with observable disease in one kidney, with most cases progressing to bilateral disease in adulthood. Signs and symptoms include high blood pressure, headaches, abdominal pain, blood in the urine, and excessive urination. Other symptoms include pain in the back, and cyst formation (renal and other organs).

* Protozoan infections are parasitic diseases caused by organisms formerly classified in the Kingdom Protozoa. They include organisms classified in Amoebozoa, Excavata, and Chromalveolata. Examples include Entamoeba histolytica, Plasmodium (some of which cause malaria), and Giardia lamblia. Trypanosoma brucei, transmitted by the tsetse fly and the cause of African sleeping sickness, is another example.

* Rheumatic fever is an inflammatory disease that can involve the heart, joints, skin, and brain. The disease typically develops two to four weeks after a streptococcal throat infection. Signs and symptoms include fever, multiple painful joints, involuntary muscle movements, and occasionally a characteristic non-itchy rash known as erythema marginatum. The heart is involved in about half of cases. Damage to the heart valves, known as rheumatic heart disease, usually occurs after multiple attacks but can sometimes occur after a single attack. The damaged valves may result in heart failure, atrial fibrillation and infection of the valves. Rheumatic fever may occur following an infection of the throat by the bacteria Streptococcus pyogenes. If the infection is untreated rheumatic fever can occur in up to three percent of people. The underlying mechanism is believed to involve the production of antibodies against a person's own tissues. Some people due to their genetics are more likely to get the disease when exposed to the bacteria than others. Other risk factors include malnutrition and poverty.

* Spina bifida is a birth defect where there is incomplete closing of the backbone and membranes around the spinal cord. The most common location is the lower back, but in

rare cases it may be the middle back or neck. Associated problems include poor ability to walk, problems with bladder or bowel control, hydrocephalus, a tethered spinal cord, and latex allergy. Learning problems are relatively uncommon. Most cases of spina bifida can be prevented if the mother gets enough folate before and during pregnancy. Adding folic acid to flour has been found to be effective for most women. Physical signs of spina bifida may include: Leg weakness and paralysis, orthopedic abnormalities (i.e., club foot, hip dislocation, scoliosis), bladder and bowel control problems, including incontinence, urinary tract infections, and poor kidney function, pressure sores and skin irritations, abnormal eye movement. 68% of children with spina bifida have an allergy to latex, ranging from mild to life-threatening.

* Tracheal stenosis refers to abnormal narrowing of the central air passageways. This can occur at the level of the larynx, trachea, carina or main bronchi. In a small number of patients narrowing may be present in more than one anatomical location. The most common symptom of laryngotracheal stenosis is gradually-worsening breathlessness (dyspnea) particularly when undertaking physical activities (exertional dyspnea). The patient may also experience added respiratory sounds which in the more severe cases can be identified as stridor but in many cases can be readily mistaken for wheeze. This creates a diagnostic pitfall in which many patients with laryngotracheal stenosis are incorrectly diagnosed as having asthma and are treated for presumed lower airway disease.

* Tracheoesophageal fistula is an abnormal connection (fistula) between the esophagus and the trachea. This connection may or may not have a central cavity; if it does, then food within the esophagus may pass into the trachea (and on to the lungs) or alternatively, air in the trachea may cross into the esophagus. Tracheoesophageal fistula is suggested in a newborn by copious salivation associated with choking, coughing, vomiting, and cyanosis coincident with the onset of feeding.

* A varix (pl. varices) is an abnormally dilated vessel with a tortuous course. Varices usually occur in the venous system, but may also occur in arterial or lymphatic vessels. Examples of varices include: Varicose veins, large tortuous veins usually found on legs, sublingual varices, esophageal varices, commonly stemming from cirrhosis of the liver, also known as oesophageal varicose, gastric varices, commonly stemming from cirrhosis of the liver, intestinal varices, scrotal varices, vulvar varices, pelvic varices, vesical varices, varicose veins associated with the urinary bladder and, rectal varices, which can be similar to external haemorrhoids.

* Bacterial venereal diseases, are infections that are commonly spread by sex, especially vaginal intercourse, anal sex and oral sex. Causing bacteria include Chancroid (Haemophilus ducreyi), Chlamydia (Chlamydia trachomatis), Gonorrhea (Neisseria gonorrhoeae), colloquially known as "the clap", Granuloma inguinale or (Klebsiella granulomatis), Mycoplasma genitalium, Mycoplasma hominis, Syphilis (Treponema pallidum), and Ureaplasma infection. Chlamydia is a sexually transmitted infection caused by the bacterium Chlamydia trachomatis. In women, symptoms may include abnormal vaginal discharge, burning during urination, and bleeding in between

periods, although most women do not experience any symptoms. Symptoms in men include pain when urinating, and abnormal discharge from their penis. If left untreated in both men and women, Chlamydia can infect the urinary tract and potentially lead to pelvic inflammatory disease (PID). PID can cause serious problems during pregnancy and even has the potential to cause infertility. It can cause a woman to have a potentially deadly ectopic pregnancy, in which the child is born outside of the uterus. Gonorrhea is caused by bacterium that lives on moist mucous membranes in the urethra, vagina, rectum, mouth, throat, and eyes. The infection can spread through contact with the penis, vagina, mouth or anus. Symptoms of Gonorrhea usually appear 2 to 5 days after contact with an infected partner however, some men might not notice symptoms for up to a month. Symptoms in men include burning and pain while urinating, increased urinary frequency, discharge from the penis (white, green, or yellow in color), red or swollen urethra, swollen or tender testicles, or sore throat. Symptoms in women may include vaginal discharge, burning or itching while urinating, painful sexual intercourse, severe pain in lower abdomen (if infection spreads to fallopian tubes), or fever (if infection spreads to fallopian tubes), however many women do not show any symptoms. Syphilis when left untreated, can lead to complications and death. Clinical manifestations of syphilis include the ulceration of the uro-genital tract, mouth or rectum; if left untreated the symptoms worsen.

* Ventricular fibrillation is when the heart quivers instead of pumps due to disorganized electrical activity in the ventricles. It results in cardiac arrest with loss of consciousness and no pulse. This is followed by irreversible death without treatment. Ventricular fibrillation is found initially in about 10% of people in cardiac arrest. Ventricular fibrillation can occur due to coronary heart disease, valvular heart disease, cardiomyopathy, Brugada syndrome, long QT syndrome, or intracranial hemorrhage. Ventricular fibrillation is a cause of cardiac arrest and sudden cardiac death. The ventricular muscle twitches randomly rather than contracting in a co-ordinated fashion (from the apex of the heart to the outflow of the ventricles), and so the ventricles fail to pump blood around the body - because of this, it is classified as a cardiac arrest rhythm. Left untreated, ventricular fibrillation is rapidly fatal as the vital organs of the body, including the heart, are starved of oxygen, and as a result patients in this rhythm will not be conscious or responsive to stimuli. Prior to cardiac arrest, patients may complain of varying symptoms depending on the underlying cause. Patients may exhibit signs of agonal breathing, which to the layperson can look like normal spontaneous breathing, but it is in fact a sign of hypoperfusion of the brainstem. Ventricular fibrillation most commonly occurs within diseased hearts, and, in the vast majority of cases, is a manifestation of underlying ischemic heart disease. Ventricular fibrillation is also seen in those with cardiomyopathy, myocarditis, and other heart pathologies. In addition, it is seen with electrolyte disturbances and overdoses of cardiotoxic drugs. It is also notable that ventricular fibrillation occurs where there is no discernible heart pathology or other evident cause, the so-called idiopathic ventricular fibrillation.

* Virus comprehensive, includes H1N1, H5N1, Ebola, Rhinoviruses, Rotaviruses, Influenza A-B.

* Vitamin A deficiency (VAD) is a lack of vitamin A in blood and tissues. It is common in poorer countries but rarely seen in more developed countries. Nyctalopia (night blindness) is one of the first signs of VAD. Night blindness is the difficulty for the eyes to adjust to dim light. Affected individuals are unable to distinguish images in low levels of illumination. People with night blindness have poor vision in the darkness, but see normally when adequate light is present. Night blindness and its worsened condition, xerophthalmia, are markers of VAD, as it can also lead to impaired immune function, cancer, and birth defects. Collections of keratin in the conjunctiva are the earliest ocular sign of VAD. Conjunctival epithelial defects occur around lateral aspect of the limbus in subclinical stage of VAD. Vitamin A deficiency affects vision by inhibiting the production of rhodopsin, the eye pigment responsible for sensing low light situations. Rhodopsin is found in the retina and is composed of retinal (an active form of vitamin A) and opsin (a protein). Night blindness caused by VAD has been associated with the loss of goblet cells in the conjunctiva, a membrane covering the outer surface of the eye. Goblet cells are responsible for secretion of mucus, and their absence results in xerophthalmia, a condition where the eyes fail to produce tears. Dead epithelial and microbial cells accumulate on the conjunctiva and form debris that can lead to infection and possibly blindness.

* Vulvar lichen sclerosus is a disease of unknown cause that results in white patches on the skin, which may cause scarring on and around genital or sometimes other skin. It occurs in females with an average age of diagnosis of 7.6 years in girls and 60 years old in women. The average age of diagnosis in boys is 9–11 years old. Several risk factors have been proposed, including autoimmune diseases, infections and genetic predisposition. There is evidence that vulvar lichen schlerosus can be associated with thyroid disease. Women are more commonly affected than men (10 to 1 ratio), particularly around and after menopause, but younger women or girls may also develop the disease. The condition most commonly occurs on the vulva and around the anus with ivory-white elevations that may be flat and glistening. There may be marked itching or the condition may be without any symptoms. There may also be thinning and shrinkage of the genital area that may make coitus, urination, and defecation painful. In males, the disease may take the form of whitish thickening of the foreskin, which cannot be retracted easily (phimosis). In contrast to women, there is no perianal involvement.

* The human whipworm is a round worm (a type of helminth) that causes trichuriasis (a type of helminthiasis) when it infects a human large intestine. It is commonly known as the whipworm which refers to the shape of the worm; it looks like a whip with wider "handles" at the posterior end. Infection occurs through ingestion of eggs and is more common in warmer areas. Whipworms eggs are passed in the feces of infected persons, and if an infected person defecates outside or if untreated human feces as used as fertilizer, eggs are deposited on soil where they can mature into an infective stage. Ingestion of these eggs can happen when hands or fingers that have contaminated dirt on them are put in the mouth or by consuming vegetables or fruits that have not been carefully cooked, washed or peeled. The eggs hatch in the small intestine, and then move into the wall of the small intestine and develop. On reaching adulthood, the thinner end (the front of the worm) burrows into the large intestine and

the thicker end hangs into the lumen and mates with nearby worms. The females can grow to 50 mm (2.0 in) long. Neither the male nor the female has much of a visible tail past the anus.

* Zoonoses are infectious diseases of animals (usually vertebrates) that can naturally be transmitted to humans. Major modern diseases such as Ebola virus disease, salmonellosis and influenza are zoonoses. Zoonoses can be caused by a range of disease pathogens such as viruses, bacteria, fungi and parasites; of 1,415 pathogens known to infect humans, 61% were zoonotic. Most human diseases originated in animals; however, only diseases that routinely involve animal to human transmission, like rabies, are considered direct zoonosis. In contrast, transmission can also occur via an intermediate species (referred to as a vector), which carry the disease pathogen without getting infected. When humans infect animals, it is called reverse zoonosis.

1.1.20 RTS-12

https://archive.org/details/Resonant_Therapy_Sessions_12

Aniridia, Anisocoria, Aortitis Syndrome, Barrett Esophagus, Benign Intracranial Hypertension, Bronchiolitis, Cancer-Bone, Cancer-Comprehensive, Cancer and Virus Specific, Carcinoma-Non Small Cell Lung, Carcinoma-Small Cell, Cardiomyopathy Hypertrophic, Cardiomyopathy Restrictive, Chlamydia Infections, Chronic Obstructive Airways Disease, Common Bile Duct Cyst, Complex Regional Pain Synrome Type-1, Corneal Edema, Cretinism, Cysts, Dementia Lewy Body, Dysentery, Enterocolitis, Entrapment Neuropathy, Fournier Gangrene, Glioblastoma, Granuloma, Hernia Diaphragmatic, Hernia Umbilical, Hidrotic Ectodermal Dysplasia, Homocystinuria, Hypertension Malignant, Hypertension Portal, Leukemia, Malignant Fibrous Histiocytoma, Medulloblastoma, Meningioma, Microcephaly, Nail Disease, Ovarian Cysts, Paramyxoviridae Infections, Perthes Disease, Porphyrias, Prosthodontics, Ptosis Eyelid, Pyelonephritis, Rectal Prolapse, Rett Syndrome, STD-Comprehensive, Scabies, Scleritis, Sclerosis Systemic, Scotoma, Spina Bifida Occulta, Subdural Hematoma, Tardive Dyskinesia, Thygeson Superficial Punctate Keratitis, Thyroid Nodule, XYY Karyotype, Zollinger–Ellison Syndrome,

*Aniridia is the absence of the iris, usually involving both eyes. It can be congenital or caused by a penetrant injury. Isolated aniridia is a congenital disorder which is not limited to a defect in iris development, but is a panocular condition with macular and optic nerve hypoplasia, cataract, and corneal changes. Vision may be severely compromised and the disorder is frequently associated with a number of ocular complications: nystagmus, amblyopia, buphthalmos, and cataract. Aniridia in some individuals occurs as part of a syndrome, such as WAGR syndrome (kidney nephroblastoma (Wilms tumour), genitourinary anomalies and intellectual disability), or

Gillespie syndrome (cerebellar ataxia).

* Anisocoria is a condition characterized by an unequal size of the eyes' pupils. Affecting 20% of the population, it can be an entirely harmless condition or a symptom of more serious medical problems. Anisocoria which is greater in dim light suggests Horner's syndrome or mechanical anisocoria. In Horner's syndrome sympathetic fibers have a defect, therefore the pupil of the involved eye will not dilate in darkness. Anisocoria which is greater in bright light suggests Adie tonic pupil, pharmacologic dilation, oculomotor nerve palsy, or damaged iris. Some of the causes of anisocoria are life-threatening, including Horner's syndrome (which may be due to carotid dissection) and oculomotor nerve palsy (due to a brain aneurysm, uncal herniation, or head trauma). Anisocoria is usually a benign finding, unaccompanied by other symptoms (physiological anisocoria). It should be considered an emergency if a patient develops acute onset anisocoria. These cases may be due to brain mass lesions which cause oculomotor nerve palsy. Anisocoria in
the presence of confusion, decreased mental status, severe headache, or other neurological symptoms can forewarn a neurosurgical emergency. This is because a hemorrhage, tumor or another intracranial mass can enlarge to a size where the third cranial nerve (CN III) is compressed, which results in uninhibited dilatation of the pupil on the same side as the lesion.

* Aortitis is the inflammation of the aortic wall. The disorder is potentially life-threatening and rare. Aortitis is most common in people 10 to 40 years of age. This inflammation has a number of possible causes, including trauma, viral or bacterial infections (notably, syphilis), and certain immune disorders and connective tissue diseases. Aortitis is most commonly seen in patients with syphilis, autoimmune vasculitis (giant cell arteritis, Takayasu's arteritis), polymyalgia rheumatica, and rheumatoid arthritis. IgG4-related disease is a more recently identified cause of aortitis and periaortitis. There is a wide range of symptoms that are dependent on the location of the aortic inflammation or associated disorder. A few symptoms recognized in patients are fever, chills, muscle pains, and malaise (general discomfort). In addition, hypertension (high blood pressure) may occur. Hypertension happens when the renal artery narrows and elasticity of the aorta and branches decrease. If untreated, has three distinct phases. The first is a prepulseless inflammatory stage with nonspecific symptoms such as fatigue, arthralgias, and low-grade fevers. Phase two includes vascular inflammation with pain secondary to the condition, along with tenderness to palpation over the site. The last phase includes symptoms of ischemia and pain associated with the use of limbs. Limbs are also cool and clammy in this stage.

* Barrett esophagus refers to an abnormal change (metaplasia) in the cells of the lower portion of the esophagus. It is characterized by the replacement of the normal stratified squamous epithelium lining of the esophagus by simple columnar epithelium with goblet cells (which are usually found lower in the gastrointestinal tract). The medical significance of Barrett's esophagus is its strong association (about 0.5% per patient-year) with esophageal adenocarcinoma, a very often deadly cancer, because of which it is considered to be a premalignant condition. The main cause of Barrett's esophagus is

thought to be an adaptation to chronic acid exposure from reflux esophagitis. The condition is found in 5–15% of patients who seek medical care for heartburn (gastroesophageal reflux disease), although a large subgroup of patients with Barrett's esophagus do not have symptoms. The change from normal to premalignant cells that indicate Barrett's esophagus does not cause any particular symptoms. Barrett's esophagus, however, is associated with these symptoms: frequent and longstanding heartburn, trouble swallowing, vomiting blood, pain under the sternum where the esophagus meets the stomach, unintentional weight loss because eating is painful.

* Benign intracranial hypertension is a neurological disorder that is characterized by increased intracranial pressure (pressure around the brain) in the absence of a tumor or other diseases. The main symptoms are stroke-like headache, nausea, and vomiting, as well as pulsatile tinnitus (sounds perceived in the ears, with the sound occurring in the same rhythm as the pulse), double vision and other visual symptoms. If untreated, it may lead to swelling of the optic disc in the eye, which can progress to vision loss.

* Bronchiolitis is inflammation of the bronchioles, the smallest air passages of the lungs. It usually occurs in children less than two years of age with the majority being aged between three and six months. It presents with coughing, wheezing and shortness of breath which can cause some children difficulty in feeding. This inflammation is usually caused by respiratory syncytial virus (70% of cases) and is much more common in the winter months. In a typical case, an infant under two years of age develops cough, wheeze, and shortness of breath over one or two days. Crackles and/or wheeze are typical findings on listening to the chest with a stethoscope. The infant may be breathless for several days. After the acute illness, it is common for the airways to remain sensitive for several weeks, leading to recurrent cough and wheeze. It is most commonly caused by respiratory syncytial virus (RSV, also known as human pneumovirus). Other viruses which may cause this illness include metapneumovirus, influenza, parainfluenza, coronavirus, adenovirus, and rhinovirus.

* Cancer-Comprehensive, Focus on Leukemia, Lymphoma, Brain, Sarcomas, Blood, Bone Cancer.

* Cancer and Virus Specific Includes BX Virus Carcinoma, BY Sarcoma, E. coli, Meningitis, Strep & Staph.

* Non-small-cell lung carcinoma (NSCLC) is any type of epithelial lung cancer other than small cell lung carcinoma (SCLC). NSCLC accounts for about 85% of all lung cancers. The most common types of NSCLC are squamous cell carcinoma, large cell carcinoma, and adenocarcinoma, but there are several other types that occur less frequently, and all types can occur in unusual histologic variants and as mixed cell-type combinations. Adenocarcinoma of the lung is currently the most common type of lung cancer in "never smokers" (lifelong non-smokers). Adenocarcinomas account for approximately 40% of lung cancers. Squamous cell carcinoma (SCC) of the lung is more common in men than in women. It is closely correlated with a history of tobacco smoking, more so than most other types of lung cancer. Large cell lung carcinoma

(LCLC) is a heterogeneous group of undifferentiated malignant neoplasms originating from transformed epithelial cells in the lung. LCLC's have typically comprised around 10% of all NSCLC in the past, although newer diagnostic techniques seem to be reducing the incidence of diagnosis of "classic" LCLC in favor of more poorly differentiated squamous cell carcinomas and adenocarcinomas. LCLC is, in effect, a "diagnosis of exclusion", in that the tumor cells lack light microscopic characteristics that would classify the neoplasm as a small-cell carcinoma, squamous-cell carcinoma, adenocarcinoma, or other more specific histologic type of lung cancer. LCLC is differentiated from small cell lung carcinoma (SCLC) primarily by the larger size of the anaplastic cells, a higher cytoplasmic-to-nuclear size ratio, and a lack of "salt-and-pepper" chromatin.

* Small-cell carcinoma is a type of highly malignant cancer that most commonly arises within the lung, although it can occasionally arise in other body sites, such as the cervix, prostate, and gastrointestinal tract. Compared to non-small cell carcinoma, small cell carcinoma has a shorter doubling time, higher growth fraction, and earlier development of metastases. Small-cell carcinoma of the lung usually presents in the central airways and infiltrates the submucosa leading to narrowing of bronchial airways. Common symptoms include cough, dyspnea, weight loss, and debility. Over 70% of patients with small-cell carcinoma present with metastatic disease; common sites include liver, adrenals, bone, and brain. Small-cell carcinoma is an undifferentiated neoplasm composed of primitive-appearing cells. As the name implies, the cells in small-cell carcinomas are smaller than normal cells, and barely have room for any cytoplasm. Some researchers identify this as a failure in the mechanism that controls the size of the cells. Due to its high grade neuroendocrine nature, small-cell carcinomas can produce ectopic hormones, including adrenocorticotropic hormone (ACTH) and anti-diuretic hormone (ADH). Ectopic production of large amounts of ADH leads to syndrome of inappropriate antidiuretic hormone hypersecretion (SIADH). Lambert-Eaton myasthenic syndrome (LEMS) is a well-known paraneoplastic condition linked to small-cell carcinoma. When associated with the lung, it is sometimes called "oat cell carcinoma" due to the flat cell shape and scanty cytoplasm. Small-cell lung carcinoma can occur in combination with a wide variety of other histological variants of lung cancer, including extremely complex malignant tissue admixtures. When it is found with one or more differentiated forms of lung cancer, such as squamous cell carcinoma or adenocarcinoma, the malignant tumor is then diagnosed and classified as a combined small cell lung carcinoma (c-SCLC).

* Hypertrophic cardiomyopathy (HCM) is a disease in which a portion of the myocardium (heart muscle) is enlarged without any obvious cause, creating functional impairment of the heart. It is the leading cause of sudden death in young athletes. The occurrence of hypertrophic cardiomyopathy is a significant cause of sudden cardiac death in any age group and a cause of disabling cardiac symptoms. HCM is frequently asymptomatic until sudden cardiac death, and for this reason some suggest routinely screening certain populations for this disease. In most patients, HCM is associated with little or no disability and normal life expectancy. A cardiomyopathy is a disease that affects the muscle of the heart. With HCM, the myocytes (cardiac contractile cells) in the

heart increase in size, which results in the thickening of the heart muscle. In addition, the normal alignment of muscle cells is disrupted, a phenomenon which is known as myocardial disarray. HCM also causes disruptions of the electrical functions of the heart.

* Restrictive cardiomyopathy (RCM) is a form of cardiomyopathy in which the walls are rigid, and the heart is restricted from stretching and filling with blood properly. It is the least common of the three subtypes (JF Goodwin) of cardiomyopathy, which includes hypertrophic and dilated as well as restrictive. Rhythmicity and contractility of the heart may be normal, but the stiff walls of the heart chambers (atria and ventricles) keep them from adequately filling, reducing preload and end-diastolic volume. Thus, blood flow is reduced, and blood volume that would normally enter the heart is backed up in the circulatory system. In time, restrictive cardiomyopathy patients develop diastolic dysfunction and eventually heart failure. Untreated hearts with RCM often develop the following characteristics: Biatrial enlargement, thickened left ventricular walls (with normal chamber size), thickened right ventricular free wall (with normal chamber size), elevated right atrial pressure (>12mmHg), moderate pulmonary hypertension, normal systolic function, poor diastolic function, typically Grade III - IV Diastolic heart failure.

* Chlamydia infection, often simply known as Chlamydia, is a sexually transmitted infection caused by the bacterium Chlamydia trachomatis. Most people who are infected have no symptoms. When symptoms do develop this can take a few weeks following infection to occur. Symptoms in women may include vaginal discharge or burning with urination. Symptoms in men may include discharge from the penis, burning with urination, or pain and swelling of one or both testicles. The infection can spread to the upper genital tract in women causing pelvic inflammatory disease which may result in future infertility or ectopic pregnancy. Repeated infections of the eyes that go without treatment can result in trachoma, a common cause of blindness in the developing world. Chlamydia can be spread during vaginal, anal, or oral sex, and can be passed from an infected mother to her baby during childbirth. The eye infections may also be spread by personal contact, flies, and contaminated towels in areas with poor sanitation. Chlamydia trachomatis only occurs in humans.

* Chronic obstructive airways disease causes chronic breathing problems with occasional flares. It usually results from a combination of factors. Chronic asthma for which the cause has never been found and excluded. Chronic infection: such as bronchitis or bronchiectesis. Chronic lung inflammation: from pollution. Emphysema: this is secondary to chronic inflammation. With emphysema the walls between pulmonary alveoli are destroyed thus reducing the total surface area for oxygen to diffuse. Fluid on the lungs is often a complicating factor if the sufferer also has heart failure. 90% of all cases are usually in people who are (or have been) smokers. Up to 15% of smokers will go on to develop this progressive disease. Other causes include second hand smoke and exposure to environmental pollutants, and certain enzyme deficiencies. COAD is associated with chronic obstruction of the flow of air out of the lungs. This obstruction is generally permanent and progressive over time. This is because cigarette smoke causes an inflammation of the lining of the lungs. Over time,

this chronic inflammation destroys the normal elastic tissue that keeps the airways open. Normally when we breathe out, the airways are prevented from collapsing under pressure by this elastic tissue. Without this tissue being present, the airways collapse, leading to trapping of air and mucus, which can get infected and cause more damage. People with this condition often cough up large amounts of sputum for several months of the year because the inflammation stimulates the production of mucus. This mucus further narrows the already inflamed airways. Unlike asthma, where the inflammation and airway narrowing is reversible, in COAD, the degree of reversibility is substantially less. The main symptoms of this condition are being short of breath on exertion, coughing up sputum (usually in the mornings) for more than three months of the year for two or more years in a row. In the long term up to half of all the people who suffer from this condition say that it limits what they can do.

* Choledochal cysts (aka bile duct cyst) are congenital conditions involving cystic dilatation of bile ducts. They are uncommon in western countries but not as rare in East Asian nations like Japan and China. Most patients have symptoms in the first year of life. It is rare for symptoms to be undetected until adulthood, and usually adults have associated complications. The classic triad of intermittent abdominal pain, jaundice, and a right upper quadrant abdominal mass is found only in minority of patients. In infants, choledochal cysts usually lead to obstruction of the bile ducts and retention of bile. This leads to jaundice and an enlarged liver. If the obstruction is not relieved, permanent damage may occur to the liver - scarring and cirrhosis - with the signs of portal hypertension (obstruction to the flow of blood through the liver) and ascites (fluid accumulation in the abdomen). There is an increased risk of cancer in the wall of the cyst. In older individuals, choledochal cysts are more likely to cause abdominal pain and intermittent episodes of jaundice and occasionally cholangitis (inflammation within the bile ducts caused by the spread of bacteria from the intestine into the bile ducts). Pancreatitis also may occur. The cause of these complications may be related to either abnormal flow of bile within the ducts or the presence of gallstones.

* Complex regional pain syndrome (CRPS) is a long term condition that often worsens with time. It is characterized by severe pain and sensitivity, swelling, and changes in the skin. It may initially affect one limb and then spread throughout the body; 35% of people afflicted report symptoms throughout their whole body. Clinical features of CRPS have been found to be neurogenic inflammation, nociceptive sensitisation, vasomotor dysfunction, and maladaptive neuroplasticity. The symptoms of CRPS usually initially manifest near the site of a (typically minor) injury. The most common symptoms are pain sensations, including burning, stabbing, grinding, and throbbing. Moving or touching the limb is often intolerable. The patient may also experience muscle spasms; local swelling; extreme sensitivity to things such as wind and water, touch and vibrations; abnormally increased sweating; changes in skin temperature (usually hot but sometimes cold) and color (bright red or a reddish violet); softening and thinning of bones; joint tenderness or stiffness; changes in nail and hair growth and/or restricted or painful movement. Drop attacks (falls), pre-syncope, and syncope (fainting) are infrequently reported, as are visual problems. The symptoms of CRPS vary in severity and duration. Since CRPS is a systemic problem, potentially any organ can be affected.

CRPS types I and II share the common diagnostic criteria. Spontaneous pain or allodynia (pain resulting from a stimulus which would not normally provoke pain, such as a light touch of the skin) is not limited to the territory of a single peripheral nerve and is disproportionate to the inciting event. There is a history of edema, skin blood flow abnormality, or abnormal sweating in the region of the pain since the inciting event. No other conditions can account for the degree of pain and dysfunction. The two types differ only in the nature of the inciting event. Type I CRPS develops following an initiating noxious event that may or may not have been traumatic, while type II CRPS (Causalgia) develops after a nerve injury.

* Corneal edema is a swelling of the cornea, the thin transparent covering over the iris of the eye, caused by fluid retention. The cornea is key to clear, crisp vision. In healthy individuals, it is continuously lubricated with fresh tears, and old fluid is drained away to keep the shape of the cornea consistent and even. In people with corneal edema, it starts to swell and vision distortions like halos around lights and blurred vision can develop. Left untreated, pain can emerge in the eye and small blisters may form in and around the cornea. Common causes of corneal edema include eye surgery, particularly on the cornea itself, trauma to the eye, inflammation, infections, increased pressure in the eye, improper contact use, and chronic eye diseases. Glaucoma, for example, can cause edema by increasing pressure inside the eye. Most commonly, this condition is seen in people over age 50, although younger patients can develop corneal edema as well, especially if they have chronic eye problems or experience eye trauma.

* Cretinism is a condition of severely stunted physical and mental growth due to untreated congenital deficiency of thyroid hormone (congenital hypothyroidism) usually due to maternal hypothyroidism. Congenital hypothyroidism can be endemic, genetic, or sporadic. If untreated, it results in mild to severe impairment of both physical and mental growth and development. Poor length growth is apparent as early as the first year of life. Adult stature without treatment ranges from 100 to 160 cm (3 ft 3 in to 5 ft 3 in), depending on severity, sex, and other genetic factors. In adults, Cretinism results in mental deterioration, swelling of the skin, loss of water and hair. Bone maturation and puberty are severely delayed. Ovulation is impeded, and infertility is common. Neurological impairment may be mild, with reduced muscle tone and coordination, or so severe that the person cannot stand or walk. Cognitive impairment may also range from mild to so severe that the person is nonverbal and dependent on others for basic care. Thought and reflexes are slower. Other signs may include thickened skin, enlarged tongue, or a protruding abdomen. Dwarfism may also be caused by malnutrition or other hormonal deficiencies, such as insufficient growth hormone secretion, hypopituitarism, decreased secretion of growth hormone-releasing hormone, deficient growth hormone receptor activity and downstream causes, such as insulin-like growth factor 1 (IGF-1) deficiency. Around the world, the most common cause of congenital hypothyroidism is iodine deficiency. Cretinism is therefore most probably due to a diet deficient in iodine.

* A cyst is a closed sac, having a distinct membrane and division compared to the nearby tissue. Hence, it is a cluster of cells that have grouped together to form a sac (not unlike the manner in which water molecules group together, forming a bubble);

however, the distinguishing aspect of a cyst is that the cells forming the "shell" of such a sac are distinctly abnormal (in both appearance and behaviour) when compared to all surrounding cells for that given location. It may contain air, fluids, or semi-solid material. A collection of pus is called an abscess, not a cyst. Once formed, a cyst may sometimes resolve on its own. Some cysts are neoplastic and are thus called cystic tumors; many types are not neoplastic. Some are dysplastic or metaplastic. Pseudocysts are similar to cysts (having a sac filled with fluid) but lack an epithelial lining.

* Dementia with Lewy bodies (DLB) is a type of dementia that gradually worsens over time. Additional symptoms may include fluctuations in alertness, seeing things that other people do not, slowness of movement, trouble walking, and rigidity. Excessive movement during sleep and mood changes such as depression are also common. The cause is unknown. There is typically no family history among those affected. The underlying mechanism involves the buildup of Lewy bodies, clumps of alpha-synuclein protein in neurons. It is classified as a neurodegenerative disorder. DLB is the most common cause of dementia after Alzheimer's and vascular dementia. It typically begins after the age of 50. About 0.1% of those over 65 are affected. Males appear to be more commonly affected than females. In the late part of the disease people may depend entirely on others for their care. Life expectancy following diagnosis is approximately eight years. The presenting symptom of dementia with Lewy bodies is often cognitive dysfunction, though dementia eventually occurs in all individuals with DLB. In contrast to Alzheimer disease (AD), in which memory loss is the first symptom, those with DLB first experience impaired attention, executive function and visuospatial function, while memory is affected later. These impairments present as driving difficulty, such as becoming lost, misjudging distances, or as impaired job performance.

* Dysentery is a type of gastroenteritis that results in diarrhea with blood. Other symptoms may include fever, abdominal pain, and a feeling of incomplete defecation. It is caused by a number of types of infection such as bacteria, viruses, parasitic worms, or protozoa. The mechanism is an inflammatory disorder of the intestine, especially of the colon. The most common form of dysentery is bacillary dysentery which is typically a mild illness, causing symptoms normally consisting of mild stomach pains and frequent passage of stool or diarrhea. Symptoms normally present themselves after one to three days and are usually no longer present after a week. The frequency of urges to defecate, the large volume of liquid feces passed, and the presence of mucus, pus and blood depends on the pathogen that is causing the disease. Temporary lactose intolerance can occur. In some caustic occasions severe abdominal pain, fever, shock, and delirium can all be symptoms. In extreme cases, dysentery patients may pass over one litre of fluid per hour. More often, individuals will complain of nausea, abdominal pain, and frequent watery and usually foul-smelling diarrhea, accompanied by mucus and blood, rectal pain, and fever. Vomiting, rapid weight-loss, and generalized muscle aches sometimes also accompany dysentery. On rare occasions, the amoebic parasite will invade the body through the bloodstream and spread beyond the intestines. In such cases, it may more seriously infect other organs such as the brain, lungs, and the liver.

* Enterocolitis or coloenteritis is an inflammation of the digestive tract, involving enteritis

of the small intestine and colitis of the colon. It may be caused by various infections, with bacteria, viruses, fungi, parasites, or other causes. Common clinical manifestations of enterocolitis are frequent diarrheal defecations, with or without nausea, vomiting, abdominal pain, fever, chills, alteration of general condition. General manifestations are given by the dissemination of the infectious agent or its toxins throughout the body, or – most frequently – by significant losses of water and minerals, the consequence of diarrhea and vomiting.

* Entrapment neuropathy, is a medical condition caused by direct pressure on a nerve. It is known colloquially as a trapped nerve, though this may also refer to nerve root compression (by a herniated disc, for example). Its symptoms include pain, tingling, numbness and muscle weakness. The symptoms affect just one particular part of the body, depending on which nerve is affected. Nerve injury by a single episode of physical trauma is in one sense a compression neuropathy but is not usually included under this heading. Tingling, numbness, and/ or a burning sensation in the area of the body affected by the corresponding nerve. These experiences may occur directly following insult or may occur several hours or even days afterwards. Note that pain is not a common symptom of nerve entrapment. A nerve may be compressed by prolonged or repeated external force, such as sitting with one's arm over the back of a chair (radial nerve), frequently resting one's elbows on a table (ulnar nerve), or an ill-fitting cast or brace on the leg (peroneal nerve). Part of the patient's body can cause the compression and the term entrapment neuropathy is used particularly in this situation. The offending structure may be a well-defined lesion such as a tumour (for example a lipoma, neurofibroma or metastasis), a ganglion cyst or a haematoma. Alternatively, there may be expansion of the tissues around a nerve in a space where there is little room for this to occur, as is often the case in carpal tunnel syndrome. This may be due to weight gain or peripheral oedema (especially in pregnancy), or to a specific condition such as acromegaly, hypothyroidism or scleroderma and psoriasis. Some conditions cause nerves to be particularly susceptible to compression. These include diabetes, in which the blood supply to the nerves is already compromised, rendering the nerve more sensitive to minor degrees of compression. The symptoms and signs depend on which nerve is affected, where along its length the nerve is affected, and how severely the nerve is affected. Positive sensory symptoms are usually the earliest to occur, particularly tingling and neuropathic pain, followed or accompanied by reduced sensation or complete numbness. Muscle weakness is usually noticed later, and is often associated with muscle atrophy.

* Fournier gangrene is a type of necrotizing fasciitis or gangrene affecting the perineum. It commonly occurs in elderly men, but it can also occur in women and children. It is more likely to occur in those with diabetes, alcoholics, or those who are immune compromised.

* Glioblastoma, also known as glioblastoma multiforme (GBM), is the most common and most aggressive cancer that begins within the brain. Signs and symptoms are initially non-specific. They may include headaches, personality changes, nausea, and symptoms similar to those of a stroke. Worsening of symptoms is often rapid. This can

progress to unconsciousness. Although common symptoms of the disease include seizure, nausea and vomiting, headache, memory loss, and hemiparesis, the single most prevalent symptom is a progressive memory, personality, or neurological deficit due to temporal and frontal lobe involvement. The kind of symptoms produced depends more on the location of the tumor than on its pathological properties. The tumor can start producing symptoms quickly, but occasionally is an asymptomatic condition until it reaches an enormous size. For unknown reasons, GBM occurs more commonly in males. Most glioblastoma tumors appear to be sporadic, without any genetic predisposition.

* Granuloma is an inflammation found in many diseases. It is a collection of immune cells known as histiocytes (macrophages). Granulomas form when the immune system attempts to wall off substances it perceives as foreign but is unable to eliminate. Such substances include infectious organisms including bacteria and fungi, as well as other materials such as keratin and suture fragments.

* Diaphragmatic hernia is a defect or hole in the diaphragm that allows the abdominal contents to move into the chest cavity. The following types of diaphragmatic hernia exist, Congenital diaphragmatic hernia, Morgagni's hernia, Bochdalek hernia, Hiatal hernia, Iatrogenic diaphragmatic hernia and, Traumatic diaphragmatic hernia. The diaphragm is the muscle between the chest and abdomen that helps with breathing. The opening allows part of the organs from the belly to move into the chest cavity near the lungs. A diaphragmatic hernia is a rare defect. It occurs while the baby is developing in the womb. Because the diaphragm is not fully developed, organs, such as the stomach, small intestine, spleen, part of the liver, and the kidney, may take up part of the chest cavity. CDH most often involves only one side of the diaphragm. It is more common on the left side. Often, the lung tissue and blood vessels in the area do not develop normally either. It is not clear if the diaphragmatic hernia causes the underdeveloped lung tissue and blood vessels, or the other way around. 40% of babies with this condition have other problems as well. Having a parent or sibling with the condition increases the risk. Severe breathing problems almost always develop shortly after the baby is born. This is due in part to poor movement of the diaphragm muscle and crowding of the lung tissue. Problems with breathing and oxygen levels are often due to underdeveloped lung tissue and blood vessels as well. Other symptoms include bluish colored skin due to lack of oxygen, rapid breathing (tachypnea), fast heart rate (tachycardia). Complications may include lung infections and other congenital problems.

* An umbilical hernia is a health condition where the abdominal wall behind the navel is damaged. It may cause the navel to bulge outwards — the bulge consisting of abdominal fat from the greater omentum or occasionally parts of the small intestine. The bulge can often be pressed back through the hole in the abdominal wall, and may "pop out" when coughing or otherwise acting to increase intra-abdominal pressure. A hernia is present at the site of the umbilicus (commonly called a navel, or belly button) in the newborn; although sometimes quite large, these hernias tend to resolve without any treatment by around the age of 2–3 years. Obstruction and strangulation of the hernia is rare because the underlying defect in the abdominal wall is larger than in an inguinal

hernia of the newborn. The size of the base of the herniated tissue is inversely correlated with risk of strangulation (i.e. narrow base is more likely to strangulate). Babies are prone to this malformation because of the process during fetal development by which the abdominal organs form outside the abdominal cavity, later returning into it through an opening which will become the umbilicus. Hernias may be asymptomatic and present only as a bulge of the umbilicus. Symptoms may develop when the contracting abdominal wall causes pressure on the hernia contents. This results in abdominal pain or discomfort. These symptoms may be worsened with lifting and straining.

* Hidrotic ectodermal dysplasia is caused by mutations in a connexin gene, GJB6 or connexin-30, characterized by scalp hair that is wiry, brittle, and pale, often associated with patchy alopecia. Hidrotic ectodermal dysplasia 2, or Clouston syndrome is characterized by partial or total alopecia, dystrophy of the nails, hyperpigmentation of the skin (especially over the joints), and clubbing of the fingers. Sparse scalp hair and dysplastic nails are seen early in life. In infancy, scalp hair is wiry, brittle, patchy, and pale; progressive hair loss may lead to total alopecia by puberty. The nails may be milky white in early childhood; they gradually become dystrophic, thick, and distally separated from the nail bed. Palmoplantar keratoderma may develop during childhood and increases in severity with age. The clinical manifestations are highly variable even within the same family.

* Homocystinuria is an inherited disorder of the metabolism of the amino acid methionine, often involving cystathionine beta synthase. This defect leads to a multi-systemic disorder of the connective tissue, muscles, central nervous system (CNS), and cardiovascular system. Homocystinuria represents a group of hereditary metabolic disorders characterized by an accumulation of the amino acid homocysteine in the serum and an increased excretion of homocysteine in the urine. Infants appear to be normal and early symptoms, if any are present, are vague. Signs and symptoms of homocystinuria that may be seen include a family history of homocystinuria. Flush across the cheeks. Musculoskeletal anomalies. Intellectual disability. Seizures. Psychiatric disease. Eye anomalies and vascular disease.

* Malignant hypertensionis hypertension (high blood pressure) with acute impairment of one or more organ systems (especially the central nervous system, cardiovascular system and/or the renal system) that can result in irreversible organ damage. In a hypertensive emergency, the blood pressure should be slowly lowered over a period of minutes to hours with an antihypertensive agent. The eyes may show retinal hemorrhage or an exudate. Papilledema (optic disk swelling) must be present before a diagnosis of malignant hypertension can be made. The brain shows manifestations of increased intracranial pressure, such as headache, vomiting, and/or subarachnoid or cerebral hemorrhage. Patients will usually suffer from left ventricular dysfunction. The kidneys will be affected, resulting in hematuria, proteinuria, and acute renal failure. It differs from other complications of hypertension in that it is accompanied by papilledema. This can be associated with hypertensive retinopathy. Other signs and symptoms can include chest pain, arrhythmias, headache, epistaxis, dyspnea, faintness

or vertigo, severe anxiety, agitation, altered mental status, paresthesias and vomiting.

* Portal hypertension is hypertension (high blood pressure) in the hepatic portal system, which are the portal vein and its branches, which draining from most of the intestines to the liver. Portal hypertension is defined as a hepatic venous pressure gradient equal to or greater than 6 mmHg. Cirrhosis (a form of chronic liver failure) is the most common cause of portal hypertension; other, less frequent causes are therefore grouped as non-cirrhotic portal hypertension. Signs and symptoms of portal hypertension include ascites (free fluid in the peritoneal cavity). Abdominal pain or tenderness (when bacteria infect the ascites, as in Spontaneous bacterial peritonitis). Increased spleen size (Splenomegaly), which may lead to lower platelet counts (thrombocytopenia) Swollen veins of the oesophagus (Oesophageal varices), which may bleed and cause vomiting of blood (haematemesis). Swollen veins on the anterior abdominal wall (sometimes referred to as Caput medusae). Hemorrhoids (swollen or dilated hemorrhoidal veins).

* Leukemia is a group of cancers that usually begin in the bone marrow and result in high numbers of abnormal white blood cells. These white blood cells are not fully developed and are called blasts or leukemia cells. Symptoms may include bleeding and bruising problems, feeling tired, fever, and an increased risk of infections. These symptoms occur due to a lack of normal blood cells.

* Malignant fibrous histiocytoma or pleomorphic undifferentiated sarcoma (PUS) is a type of soft tissue sarcoma. It is considered a diagnosis of exclusion for sarcomas that cannot be more precisely categorized. PUS occurs most commonly in the extremities and retroperitoneum, but has been reported in other sites. Metastasis occurs most frequently in the lungs (90%), bones (8%), and liver (1%). In the extremities, it presents itself as a painless enlarging soft tissue mass. Pleomorphic undifferentiated sarcomas are, by definition, undifferentiated, meaning (as the name implies) that they do not bear a resemblance to any normal tissue.

* Medulloblastoma is the most common type of pediatric malignant primary brain tumor (cancer), originating in the part of the brain that is towards the back and the bottom, on the floor of the skull, in the cerebellum or posterior fossa. Medulloblastomas are non-invasive rapidly growing tumors that, unlike most brain tumors, spread through the cerebrospinal fluid (CSF) and frequently metastasize to different locations along the surface of the brain and spinal cord. The cumulative relative survival rate for all age groups and histology follow-up was 60%, 52%, and 32% at 5 years, 10 years, and 20 years, respectively, with children doing better than adults. Signs and symptoms are mainly due to secondary increased intracranial pressure due to blockage of the fourth ventricle and are usually present for 1 to 5 months before diagnosis is made. The child typically becomes listless, with repeated episodes of vomiting, and a morning headache, which may lead to a misdiagnosis of gastrointestinal disease or migraine. Soon after, the child will develop a stumbling gait, truncal ataxia, frequent falls, diplopia, papilledema, and sixth cranial nerve palsy. Positional dizziness and nystagmus are also frequent and facial sensory loss or motor weakness may be present. Decerebrate attacks appear late in the disease. Extraneural metastasis to the rest of the body is rare,

and when it occurs is in the setting of relapse.

* Meningiomas are a diverse set of tumors arising from the meninges, the membranous layers surrounding the central nervous system. They arise from the arachnoid "cap" cells of the arachnoid villi in the meninges. These tumors usually are benign in nature; however, a small percentage are cancerous. Small tumors (e.g., < 2.0 cm) usually are incidental findings at autopsy without having caused symptoms. Larger tumors may cause symptoms, depending on the size and location. Focal seizures may be caused by meningiomas that overlie the cerebrum. Progressive spastic weakness in legs and incontinence may be caused by tumors that overlie the parasagittal frontoparietal region. Tumors of the Sylvian aqueduct may cause myriad motor, sensory, aphasic, and seizure symptoms, depending on the location. Increased intracranial pressure eventually occurs, but is less frequent than in gliomas. Diplopia (Double vision) or uneven pupil size may be symptoms if related pressure causes a third and/or sixth nerve palsy.

* Microcephaly is a medical condition in which the brain does not develop properly resulting in a smaller than normal head. Microcephaly may be present at birth or it may develop in the first few years of life. Often people with the disorder have an intellectual disability, poor motor function, poor speech, abnormal facial features, seizures, and dwarfism. Affected newborns generally have striking neurological defects and seizures. Severely impaired intellectual development is common, but disturbances in motor functions may not appear until later in life. Infants with microcephaly are born with either a normal or reduced head size. Subsequently, the head fails to grow, while the face continues to develop at a normal rate, producing a child with a small head and a receding forehead, and a loose, often wrinkled scalp. As the child grows older, the smallness of the skull becomes more obvious, although the entire body also is often underweight and dwarfed. Development of motor functions and speech may be delayed. Hyperactivity and intellectual disability are common occurrences, although the degree of each varies. Convulsions may also occur. Motor ability varies, ranging from clumsiness in some to spastic quadriplegia in others. Genetic factors may play a role in causing some cases of microcephaly. Relationships have been found between autism, duplications of chromosomes, and macrocephaly on one side. On the other side, a relationship has been found between schizophrenia, deletions of chromosomes, and microcephaly. The spread of Aedes mosquito-borne Zika virus has been implicated in increasing levels of congenital microcephaly by the International Society for Infectious Diseases and the US Centers for Disease Control and Prevention. Zika can spread from a pregnant woman to her fetus. This can result in other severe brain malformations and birth defects. Microcephaly generally is due to the diminished size of the largest part of the human brain, the cerebral cortex, and the condition can arise during embryonic and fetal development due to insufficient neural stem cell proliferation, impaired or premature neurogenesis, the death of neural stem cells or neurons, or a combination of these factors.

* Nail diseases are distinct from diseases of the skin. Although nails are a skin appendage, they have their own signs and symptoms which may relate to other medical

conditions. Deformity or disease of the nails may be referred to as onychosis.

* An ovarian cyst is a fluid-filled sac within the ovary. Often they cause no symptoms. Occasionally they may produce bloating, lower abdominal pain, or lower back pain. If the cyst either breaks open or causes twisting of the ovary severe pain may occur. This may result in vomiting or feeling faint. The majority of cysts are, however, harmless. Most ovarian cysts are related to ovulation being either follicular cysts or corpus luteum cysts. Other types include cysts due to endometriosis, dermoid cysts, and cystadenomas. Many small cysts occur in both ovaries in polycystic ovarian syndrome. Pelvic inflammatory disease may also result in cysts. Rarely cysts may be a form of ovarian cancer. Some or all of the following symptoms may be present, though it is possible not to experience any symptoms. Abdominal pain. Dull aching pain within the abdomen or pelvis, especially during intercourse. Uterine bleeding. Pain during or shortly after beginning or end of menstrual period; irregular periods, or abnormal uterine bleeding or spotting. Fullness, heaviness, pressure, swelling, or bloating in the abdomen. When a cyst ruptures from the ovary, there may be sudden and sharp pain in the lower abdomen on one side. Change in frequency or ease of urination (such as inability to fully empty the bladder), or difficulty with bowel movements due to pressure on adjacent pelvic anatomy. Constitutional symptoms such as fatigue, headaches. Nausea or vomiting. Weight gain. Other symptoms may depend on the cause of the cysts. Symptoms that may occur if the cause of the cysts is polycystic ovarian syndrome (PCOS) may include increased facial hair or body hair, acne, obesity and infertility. If the cause is endometriosis, then periods may be heavy, and intercourse painful. The effect of cysts not related to PCOS on fertility is unclear.

* Paramyxoviridae is a family of viruses in the order Mononegavirales. Humans, vertebrates, and birds serve as natural hosts. There are currently 38 species in this family, divided among 7 genera. Diseases associated with this negative-sense single-stranded RNA virus family include: measles, mumps, respiratory tract infections. Transmission route is air borne particles. A number of important human diseases are caused by paramyxoviruses. These include mumps, measles, which caused around 733,000 deaths in 2000, and respiratory syncytial virus (RSV), which is the major cause of bronchiolitis and pneumonia in infants and children. The human parainfluenza viruses (HPIV) are the second most common causes of respiratory tract disease in infants and children. There are four types of HPIVs, known as HPIV-1, HPIV-2, HPIV-3 and HPIV-4. HPIV-1 and HPIV-2 may cause cold-like symptoms, along with croup in children. HPIV-3 is associated with bronchiolitis, bronchitis, and pneumonia. HPIV-4 is less common than the other types, and is known to cause mild to severe respiratory tract illnesses. Paramyxoviruses are also responsible for a range of diseases in other animal species, for example canine distemper virus (dogs), phocine distemper virus (seals), cetacean morbillivirus (dolphins and porpoises), Newcastle disease virus (birds), and rinderpest virus (cattle). Some paramyxoviruses such as the henipaviruses are zoonotic pathogens, occurring naturally in an animal host, but also able to infect humans. Hendra virus (HeV) and Nipah virus (NiV) in the genus Henipavirus have emerged in humans and livestock in Australia and Southeast Asia. Both viruses are contagious, highly virulent, and capable of infecting a number of mammalian species and causing

potentially fatal disease. Due to the lack of a licensed vaccine or antiviral therapies, HeV and NiV are designated as biosafety level (BSL) 4 agents. The genomic structure of both viruses is that of a typical paramyxovirus.

* Perthes disease is a childhood hip disorder initiated by a disruption of blood flow to the ball of the femur called the femoral head. Due to the lack of blood flow, the bone dies (osteonecrosis or avascular necrosis) and stops growing. Over time, healing occurs by new blood vessels infiltrating the dead bone and removing the necrotic bone which leads to a loss of bone mass and a weakening of the femoral head. The bone loss leads to some degree of collapse and deformity of the femoral head and sometimes secondary changes to the shape of the hip socket. It is also referred to as idiopathic avascular osteonecrosis of the capital femoral epiphysis of the femoral head since the cause of the interruption of the blood supply of the head of the femur in the hip joint is unknown. The main long-term problem with this condition is that it can produce a permanent deformity of the femoral head, which increases the risk of developing osteoarthritis in adults. Perthes is a form of osteochondritis which only affects the hip, although other forms of osteochondritis can affect elbows, knees, ankles, and feet. Bilateral Perthes, which means both hips are affected, should always be investigated thoroughly to rule out multiple epiphyseal dysplasia.

* Porphyria is a group of diseases in which substances called porphyrins build up, affecting the skin or nervous system. The types that affect the nervous system are also known as acute porphyria. Symptoms of acute porphyria include abdominal pain, chest pain, vomiting, confusion, constipation, fever, and seizures. These symptoms typically come and go with attacks that last for days to weeks. Attacks may be triggered by alcohol, smoking, stress, or certain medications. If the skin is affected, blisters or itching may occur with sunlight exposure. Acute porphyrias primarily affect the nervous system, resulting in episodic crises known as acute attacks. The major symptom of an acute attack is abdominal pain, often accompanied by vomiting, hypertension (elevated blood pressure), and tachycardia (an abnormally rapid heart rate). The most severe episodes may involve neurological complications: typically motor neuropathy (severe dysfunction of the peripheral nerves that innervate muscle), which leads to muscle weakness and potentially to quadriplegia (paralysis of all four limbs) and central nervous system symptoms such as seizures and coma. Occasionally, there may be short-lived psychiatric symptoms such as anxiety, confusion, hallucinations, and, very rarely, overt psychosis. All these symptoms resolve once the acute attack passes. Chronic porphyrias are not associated with acute attacks; their primary manifestation is with skin disease. Skin disease is encountered where excess porphyrins accumulate in the skin. Porphyrins are photoactive molecules, and exposure to light results in promotion of electrons to higher energy levels. When these return to the resting energy level or ground state, energy is released. This accounts for the property of fluorescence typical of the porphyrins. This causes local skin damage. Two distinct patterns of skin disease are seen in porphyria, immediate photosensitivity and vesiculo-erosive skin disease.

* Prosthodontics, also known as dental prosthetics or prosthetic dentistry, is the area of dentistry that focuses on dental prostheses. It is the dental specialty pertaining to the

diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes. A prosthodontist is a dentist who restores optimum appearance and function to your smile. The planning and restoration of implants, treatment of temporomandibular joint disorder (TMJ), and rehabilitation of occlusion with prostheses all fall under the field of prosthodontics.

* Ptosis is a drooping or falling of the upper eyelid. The drooping may be worse after being awake longer, when the individual's muscles are tired. This condition is sometimes called "lazy eye", but that term normally refers to amblyopia. If severe enough and left untreated, the drooping eyelid can cause other conditions, such as amblyopia or astigmatism. This is why it is especially important for this disorder to be treated in children at a young age, before it can interfere with vision development. Ptosis occurs due to dysfunction of the muscles that raise the eyelid or their nerve supply (oculomotor nerve for levator palpebrae superioris and sympathetic nerves for superior tarsal muscle). It can affect one eye or both eyes and is more common in the elderly, as muscles in the eyelids may begin to deteriorate. One can, however, be born with ptosis.

* Pyelonephritis is an inflammation of the kidney tissue, calyces, and renal pelvis. It is commonly caused by bacterial infection that has spread up the urinary tract or travelled through the bloodstream to the kidneys. A similar term is "pyelitis" which means inflammation of the pelvis and calyces. In other words, pyelitis together with nephritis is collectively known as pyelonephritis. Severe cases of pyelonephritis can lead to pyonephrosis (pus accumulation around the kidney), sepsis (a systemic inflammatory response of the body to infection), kidney failure and even death. Pyelonephritis presents with fever, accelerated heart rate, painful urination, abdominal pain radiating to the back, nausea, and tenderness at the costovertebral angle on the affected side. Pyelonephritis that has progressed to urosepsis may be accompanied by signs of septic shock, including rapid breathing, decreased blood pressure, violent shivering, and occasionally delirium.Signs and symptoms of acute pyelonephritis generally develop rapidly over a few hours or a day. It can cause high fever, pain on passing urine, and abdominal pain that radiates along the flank towards the back. There is often associated vomiting. Chronic pyelonephritis causes persistent flank or abdominal pain, signs of infection (fever, unintentional weight loss, malaise, decreased appetite), lower urinary tract symptoms and blood in the urine. Chronic pyelonephritis can in addition cause fever of unknown origin. Furthermore, inflammation-related proteins can accumulate in organs and cause the condition AA amyloidosis. Physical examination may reveal fever and tenderness at the costovertebral angle on the affected side.

* Rectal prolapse is protrusion of rectal tissue through the anus to the exterior of the body. The rectum is the final section of the large intestine. Rectal prolapse can be either partial or complete. In partial prolapse, only the mucosa layer (mucous membrane) of the rectum extends outside the body. The projection is generally 0.75-1.5 in (2-4 cm) long. In complete prolapse, called procidentia, the full thickness of the rectum protrudes

for up to 4.5 in (12 cm). Rectal prolapse is most common in people over age 60, and occurs much more frequently in women than in men. It is also more common in psychiatric patients. Prolapse can occur in normal infants, where it is usually transient. In children it is often an early sign of cystic fibrosis or is due to neurological or anatomical abnormalities. Although rectal prolapse in adults may initially reduce spontaneously after bowel movements, it eventually becomes permanent. Adults who have had prior rectal or vaginal surgery, who have chronic constipation, regularly depend on laxatives, have multiple sclerosis or other neurologic diseases, stroke, or paralysis are more likely to experience rectal prolapse.

* Rett syndrome is a rare genetic postnatal neurological disorder of the grey matter of the brain that almost exclusively affects females but has also been found in male patients. The clinical features include small hands and feet and a deceleration of the rate of head growth (including microcephaly in some). Repetitive stereotyped hand movements, such as wringing and/or repeatedly putting hands into the mouth, are also noted. People with Rett syndrome are prone to gastrointestinal disorders and up to 80% have seizures. They typically have no verbal skills, and about 50% of affected individuals do not walk. Scoliosis, growth failure, and constipation are very common and can be problematic. The signs of this disorder are most easily confused with those of Angelman syndrome, cerebral palsy and autism. Rett syndrome occurs in approximately 1:10,000 live female births in all geographies, and across all ethnicities. Initial development is normal. Onset occurs between 6 and 18 months of age. During this time there are subtle developmental deviations and early indicators of Rett syndrome. A period of developmental stagnation is followed by developmental regression where language and motor milestones regress, purposeful hand use is lost, and acquired deceleration in the rate of head growth (resulting in microcephaly in some) is seen. Hand stereotypes are typical, and breathing irregularities such as hyperventilation, breathholding, or sighing are seen in many. Early on, autistic-like behavior may be seen. The infant with Rett syndrome often avoids detection until 6–18 months, owing to a relatively normal appearance and some developmental progress. However, closer scrutiny reveals disturbance of the normal spontaneous limb and body movements that are thought to be regulated in the brainstem. The brief period of developmental progress is followed by stagnation and regression of previously acquired skills. During regression, some features are similar to those of autism. Signs may stabilize for many decades, particularly for interaction and cognitive function such as making choices. Asocial behavior may change to highly social behavior. Motor functions may slow as rigidity and dystonia appear. Seizures may be problematic, with a wide range of severity. Scoliosis occurs in most, and may require corrective surgery. Those who remain ambulatory tend to have less progression of scoliosis.

* STD Comprehensive, Herpes, Gonorrhea, Syphilis, Chlamydia, HPV, HIV Symptoms.

* Scabies is a contagious skin infestation by the mite Sarcoptes scabiei. The most common symptoms are severe itchiness and a pimple-like rash. Occasionally tiny burrows may be seen in the skin. When first infected, usually two to six weeks are required before symptoms occur. If a person develops a second infection later in life,

symptoms may begin within a day. These symptoms can be present across most of the body or just certain areas such as the wrists, between fingers, or along the waistline. The head may be affected, but this is typically only in young children. The itch is often worse at night. Scratching may cause skin breakdown and an additional bacterial infection of the skin. Crusted scabies is a more severe form of the disease. It typically only occurs in those with a poor immune system and people may have millions of mites, making them much more contagious. In these cases spread of infection may occur during brief contact or via contaminated objects.

* Scleritis is a serious inflammatory disease that affects the white outer coating of the eye, known as the sclera. The disease is often contracted through association with other diseases of the body, such as granulomatosis with polyangiitis or rheumatoid arthritis. There are three types of scleritis: diffuse scleritis (the most common), nodular scleritis, and necrotizing scleritis (the most severe). Scleritis may be the first symptom of onset of connective tissue disease. Symptoms of scleritis include redness of the sclera and conjunctiva, sometimes changing to a purple hue, severe ocular pain, which may radiate to the temple or jaw. The pain is often described as deep or boring. Photophobia and tearing. Decrease in visual acuity, possibly leading to blindness.

* A scotoma is an area of partial alteration in the field of vision consisting of a partially diminished or entirely degenerated visual acuity that is surrounded by a field of normal – or relatively well-preserved – vision. Every normal mammal eye has a scotoma in its field of vision, usually termed its blind spot. This is a location with no photoreceptor cells, where the retinal ganglion cell axons that compose the optic nerve exit the retina. This location is called the optic disc. There is no direct conscious awareness of visual scotomas. They are simply regions of reduced information within the visual field. Rather than recognizing an incomplete image, patients with scotomas report that things "disappear" on them. A scotoma can be a symptom of damage to any part of the visual system, such as retinal damage from exposure to high-powered lasers, macular degeneration and brain damage. Symptom-producing, or pathological, scotomata may be due to a wide range of disease processes, affecting any part of the visual system, including the retina (in particular its most sensitive portion, the macula) and the optic nerve. A pathological scotoma may involve any part of the visual field and may be of any shape or size. A scotoma may include and enlarge the normal blind spot. Even a small scotoma that happens to affect central or macular vision will produce a severe visual disability, whereas a large scotoma in the more peripheral part of a visual field may go unnoticed by the bearer because of the normal reduced optical resolution in the peripheral visual field.

* Systemic sclerosis, is an autoimmune disease of the connective tissue. It is characterized by thickening of the skin caused by accumulation of collagen, and by injuries to small arteries.There are two forms of scleroderma: localized and systemic. The localized (limited) form affects the skin of only the face, hands, and feet. The systemic (diffuse) form involves those and, in addition, may progress to visceral organs, including the kidneys, heart, lungs, and gastrointestinal tract. Signs and symptoms associated with limited scleroderma include calcinosis, Raynaud's phenomenon,

esophageal dysfunction, sclerodactyly, and telangiectasia.

* Spina bifida occulta is the mildest form of spina bifida. In occulta, the outer part of some of the vertebrae is not completely closed. The splits in the vertebrae are so small that the spinal cord does not protrude. The skin at the site of the lesion may be normal, or it may have some hair growing from it; there may be a dimple in the skin, or a birthmark. Unlike most other types of neural tube defects, spina bifida occulta is not associated with increased AFP, a common screening tool used to detect neural tube defects in utero. This is because, unlike most of the other neural tube defects, the dural lining is maintained. Many people with this type of spina bifida do not even know they have it, as the condition is asymptomatic in most cases. The incidence of spina bifida occulta is approximately 10-20% of the population, and most people are diagnosed incidentally from spinal X-rays.

* A subdural hematoma also known as a subdural haemorrhage (SDH), is a type of hematoma, usually associated with traumatic brain injury. Blood gathers between the inner layer of the dura mater and the arachnoid mater. Usually resulting from tears in bridging veins which cross the subdural space, subdural hemorrhages may cause an increase in intracranial pressure (ICP), which can cause compression of and damage to delicate brain tissue. Subdural hematomas are often life-threatening when acute. Chronic subdural hematomas, however, have a better prognosis if properly managed. In contrast, epidural hematomas are usually caused by tears in arteries, resulting in a build-up of blood between the dura mater and skull. Symptoms of subdural hemorrhage have a slower onset than those of epidural hemorrhages because the lower pressure veins bleed more slowly than arteries. Therefore, signs and symptoms may show up in minutes, if not immediately but can be delayed as much as 2 weeks. If the bleeds are large enough to put pressure on the brain, signs of increased ICP (intracranial pressure) or damage to part of the brain will be present. Other signs and symptoms of subdural hematoma can include any combination of the following: A history of recent head injury. Loss of consciousness or fluctuating levels of consciousness. Irritability. Seizures. Pain. Numbness. Headache (either constant or fluctuating). Dizziness. Disorientation. Amnesia. Weakness or lethargy. Nausea or vomiting. Loss of appetite. Personality changes. Inability to speak or slurred speech. Ataxia, or difficulty walking. Loss of muscle control. Altered breathing patterns. Hearing loss or hearing ringing (tinnitus). Blurred Vision. Deviated gaze, or abnormal movement of the eyes. Subdural hematomas are most often caused by head injury, when rapidly changing velocities within the skull may stretch and tear small bridging veins. Subdural hematomas due to head injury are described as traumatic. Much more common than epidural hemorrhages, subdural hemorrhages generally result from shearing injuries due to various rotational or linear forces. Subdural hemorrhage is a classic finding in shaken baby syndrome, in which similar shearing forces classically cause intra- and pre-retinal hemorrhages. Subdural hematoma is also commonly seen in the elderly and in alcoholics, who have evidence of cerebral atrophy. Cerebral atrophy increases the length the bridging veins have to traverse between the two meningeal layers, hence increasing the likelihood of shearing forces causing a tear. It is also more common in patients on anticoagulants, especially aspirin and warfarin. Patients on these

medications can have a subdural hematoma with a minor injury. A further cause can be a reduction in cerebral spinal fluid pressure which can create a low pressure in the subarachnoid space, pulling the arachnoid away from the dura mater and leading to a rupture of the blood vessels.

* Tardive dyskinesia (TD) is a difficult-to-treat and often incurable form of dyskinesia, a disorder resulting in involuntary, repetitive body movements. In this form of dyskinesia, the involuntary movements are tardive, meaning they have a slow or belated onset. This neurological disorder, by definition, most frequently occurs as the result of long-term (usually at least 3 months duration) or high-dose use of antipsychotic drugs, or in children and infants as a side effect from usage of drugs for gastrointestinal disorders. Tardive dyskinesia is characterized by repetitive, involuntary movements. Some examples of these types of involuntary movements include grimacing, tongue movements, lip smacking, lip puckering, pursing of the lips or excessive eye blinking. Rapid, involuntary movements of the limbs, torso, and fingers may also occur. In some cases, an individual's legs can be so affected that walking becomes difficult or impossible. These symptoms are the opposite of patients who are diagnosed with Parkinson's disease. Parkinson's patients have difficulty moving, whereas tardive dyskinesia patients have difficulty not moving.

* Thygeson's superficial punctate keratopathy (TSPK; also Thygeson Superficial Punctate Keratitis) is a disease of the eyes. A patient with TSPK may complain of blurred vision, dry eyes, a sensation of having a foreign body stuck in the eye, photophobia (sensitivity to bright light), burning sensations and watery eyes. On inspection with a slit lamp, tiny lumps can be found on the cornea of the eye. These lumps can be more easily seen after applying fluorescein or rose Bengal dye eye-drops. The lumps appear to be randomly positioned on the cornea and they may appear and disappear over a period of time (with or without treatment). TSPK may affect one or both eyes. When both eyes are affected, the tiny lumps found on the cornea may differ in number between eyes. The severity of the symptoms often vary during the course of the disease. The disease may appear to go into remission, only to later reappear after months or years.

* Thyroid nodules are lumps which commonly arise within an otherwise normal thyroid gland. They indicate a thyroid neoplasm, but only a small percentage of these are thyroid cancers. Often these abnormal growths of thyroid tissue are located at the edge of the thyroid gland and can be felt as a lump in the throat. When they are large or when they occur in very thin individuals, they can sometimes be seen as a lump in the front of the neck. Sometimes a thyroid nodule presents as a fluid-filled cavity called a thyroid cyst. Often, solid components are mixed with the fluid. Thyroid cysts most commonly result from degenerating thyroid adenomas, which are benign, but they occasionally contain malignant solid components. Only a small percentage of lumps in the neck are malignant (around 4 – 6.5%), and most thyroid nodules are benign colloid nodules. There are many factors to consider when diagnosing a malignant lump. Trouble swallowing or speaking, swollen cervical lymph nodes or a firm, immobile nodule are more indicative of malignancy.

* XYY syndrome is a genetic condition in which a human male has an extra male (Y) chromosome, giving a total of 47 chromosomes instead of the more usual 46. This produces a 47,XYY karyotype, which occurs every 1 in 1,000 male births. People with the 47,XYY karyotype have an increased growth velocity from early childhood, with an average final height approximately 7 cm (3") above expected final height. 47,XYY syndrome is associated with an increased risk of learning disabilities and delayed development of speech and language skills. Delayed development of motor skills (such as sitting and walking), weak muscle tone (hypotonia), hand tremors or other involuntary movements (motor tics), and behavioral and emotional difficulties are also possible. These characteristics vary widely among affected boys and men. In some cases, affected individuals develop behavioral problems such as an explosive temper, hyperactivity, impulsivity, defiant actions, or, in some cases, antisocial behavior. There is a higher rate of attention deficit and hyperactivity disorder and a smaller increased risk for having an autism spectrum disorder.

* Zollinger–Ellison syndrome (ZES) is caused by a non–beta islet cell (islet of Langerhans), gastrin-secreting tumor of the pancreas that stimulates the acid-secreting cells of the stomach (parietal cells) to maximal activity, with consequent gastrointestinal mucosal ulceration. Patients with Zollinger–Ellison syndrome may experience abdominal pain and diarrhea. The diagnosis is also suspected in patients without symptoms who have severe ulceration of the stomach and small bowel, especially if they fail to respond to treatment. Chronic diarrhea, including steatorrhea (fatty stools). Pain in the esophagus, especially between and after meals at night. Nausea, wheezing, vomiting blood (digested blood), malnourishment, loss of weight due to loss of appetite. Gastrinomas may occur as single tumors or as multiple, small tumors. About one-half to two-thirds of single gastrinomas are malignant tumors that most commonly spread to the liver and lymph nodes near the pancreas and small bowel. Nearly 25 percent of patients with gastrinomas have multiple tumors as part of a condition called multiple endocrine neoplasia type I (MEN I). MEN I patients have tumors in their pituitary gland and parathyroid glands, in addition to tumors of the pancreas.

1.1.21 RTS-13

https://archive.org/details/Resonant_Therapy_Sessions_13

Anemia Fanconi, Anemia Megaloblastic, Anemia Pernicious, Arrhythmogenic Cardiomyopathy, Biliary Atresia, Bladder Exstrophy, Blepharospasm-Oromandibular Dystonia, Cancer-Cervical, Cancer-Digestive System, Cancer-Esophageal, Cancer-Gestationa Tumor, Cardiospasm, Carotid Stenosis, Central Cord Syndrome, Central Nervous System Diseases, Cheilitis, Clostridium Infections, Cushing Syndrome, Diphteria, Distichiasis, Encephalopathy, End-Stage Renal Disease, Episiotomy, Esophagitis, Fatty Liver, Fragile-X Syndrome, Gastrointestinal Stromal Tumors, Glomerulonephritis, Hereditary Sensory-Autonomic Neuropathy Type-1, Hereditary

Sensory-Autonomic Neuropathy Type-2, Hereditary Sensory-Autonomic Neuropathy Type-4, Hereditary Sensory-Autonomic Neuropathy Type-5, Hydatidiform Mole, Hyperthyroidism, Iritis, Iron-Deficiency Anemia, Kidney Diseases Cystic, Kidney Stones, Lateral Sclerosis, Left Ventricular Hypertrophy, Lymphedema, Macroglobulinemia, Macular Dystrophy Corneal, Mitochondrial Myopathy, Myoproliferative Disorders, Myxoma, Nevus Flammeus, Osteitis Deformans, POEMS Syndrome, Paget Disease, Paget Disease Of Bone, Pantothenate Kinase-Neurodegeneration, Paraganglioma, Pharyngeal Diseases, Pleural Diseases, Right Ventricular Hypertrophy, Sexual Male Erectyle Dysfunction, Spinocerebellar Ataxia Type-3, Thyroid Hormone Resistance Syndrome, Tricuspid Atresia,

* Fanconi anemia (FA) is a rare genetic disease. Among those affected the majority develop cancer, most often acute myelogenous leukemia, and 90% develop bone marrow failure (the inability to produce blood cells) by age 40. About 60–75% of people have congenital defects, commonly short stature, abnormalities of the skin, arms, head, eyes, kidneys, and ears, and developmental disabilities. Around 75% of people have some form of endocrine problem, with varying degrees of severity. FA is the result of a genetic defect in a cluster of proteins responsible for DNA repair. During childhood, short stature and skin pigmentation, including café au lait spots, may become apparent. The first sign of a hematologic problem is usually petechiae and bruises, with later onset of pale appearance, feeling tired, and infections. Because macrocytosis usually precedes a low platelet count, patients with typical congenital anomalies associated with FA should be evaluated for an elevated red blood cell mean corpuscular volume. Clinically, hematological abnormalities are the most serious symptoms in FA. By the age of 40, 98% of FA patients will have developed some type of hematological abnormality. However, there are a few cases in which older patients have died without ever developing them. Symptoms appear progressively, and often lead to complete bone marrow failure. While at birth, blood count is usually normal, macrocytosis/megaloblastic anemia, defined as unusually large red blood cells, is the first detected abnormality, often within the first decade of life (median age of onset is 7 years). Within the next 10 years, over 50% of patients presenting haematological abnormalities will have developed pancytopenia, defined as abnormalities in two or more blood cell lineages.

* Megaloblastic anemia (or megaloblastic anaemia) is an anemia that results from inhibition of DNA synthesis during red blood cell production. When DNA synthesis is impaired, the cell cycle cannot progress from the G2 growth stage to the mitosis (M) stage. This leads to continuing cell growth without division, which presents as macrocytosis. Megaloblastic anemia has a rather slow onset, especially when compared to that of other anemias. The defect in red cell DNA synthesis is most often due to hypovitaminosis, specifically a deficiency of vitamin B12 and/or folic acid. Vitamin B12 deficiency alone will not cause the syndrome in the presence of sufficient folate, as the mechanism is loss of B12 dependent folate recycling, followed by folate-deficiency loss of nucleic acid synthesis (specifically thymine), leading to defects in DNA synthesis. Folic acid supplementation in the absence of vitamin B12 prevents this type of anemia

(although other vitamin B12-specific pathologies may be present). Loss of micronutrients may also be a cause. Copper deficiency resulting from an excess of zinc from unusually high oral consumption of zinc-containing denture-fixation creams has been found to be a cause. Megaloblastic anemia not due to hypovitaminosis may be caused by antimetabolites that poison DNA production directly, such as some chemotherapeutic or antimicrobial agents (for example azathioprine or trimethoprim). The pathological state of megaloblastosis is characterized by many large immature and dysfunctional red blood cells (megaloblasts) in the bone marrow and also by hypersegmented neutrophils (those exhibiting five or more nuclear lobes ("segments"), with up to four lobes being normal). These hypersegmented neutrophils are found in the "peripheral blood".

* Pernicious anemia is a type of Vitamin B12 deficiency anemia, a disease in which not enough red blood cells are present due to a lack of vitamin B12. The most common initial symptom is feeling tired. Other symptoms may include shortness of breath, pale skin, chest pain, numbness in the hands and feet, poor balance, a smooth, red tongue, poor reflexes, and confusion. If treatment is not provided, some of these problems may become permanent. Although pernicious anemia technically refers to cases resulting from not enough intrinsic factor, it is often used to describe all cases of anemia due to not enough vitamin B12. Lack of intrinsic factor is most commonly due to an autoimmune attack on the cells that make it in the stomach. It can also occur following the surgical removal of part of the stomach or from an inherited disorder. Intrinsic factor (IF), also known as gastric intrinsic factor (GIF), is a glycoprotein produced by the parietal cells of the stomach. It is necessary for the absorption of vitamin B12 (cobalamin) later on in the small intestine. In pernicious anemia, which is usually an autoimmune disease, autoantibodies directed against intrinsic factor or parietal cells themselves lead to an intrinsic factor deficiency, malabsorption of vitamin B12, and subsequent megaloblastic anemia. Atrophic gastritis can also cause intrinsic factor deficiency and anemia through damage to the parietal cells of the stomach wall. Pancreatic exocrine insufficiency can interfere with normal dissociation of vitamin B12 from its binding proteins in the small intestine, preventing its absorption via the intrinsic factor complex. Other risk factors contributing to pernicious anemia are anything that damages or removes a portion of the stomach's parietal cells, including bariatric surgery, gastric tumors, gastric ulcers, and excessive consumption of alcohol. Mutations in the GIF gene are responsible for a rare inheritable disease called intrinsic factor deficiency which results in malabsorption of vitamin B12. Other causes of low vitamin B12 include a poor diet, celiac disease, and a tapeworm infection. When suspected, diagnosis is made by blood and, occasionally, bone marrow tests. Blood tests may show fewer but larger red blood cells, low numbers of young red blood cells, low levels of vitamin B12, and antibodies to intrinsic factor. Among those over the age of 60, about 2% have the condition. It more commonly affects people of northern European descent. Women are more commonly affected than men.

* Arrhythmogenic right ventricular dysplasia (ARVD) is an inherited heart disease. ARVD is caused by genetic defects of the parts of heart muscle (also called myocardium or cardiac muscle) known as desmosomes, areas on the surface of heart muscle cells

which link the cells together. The desmosomes are composed of several proteins, and many of those proteins can have harmful mutations. The disease is a type of nonischemic cardiomyopathy that involves primarily the right ventricle. It is characterized by hypokinetic areas involving the free wall of the right ventricle, with fibrofatty replacement of the right ventricular myocardium, with associated arrhythmias originating in the right ventricle. ARVD can be found in association with diffuse palmoplantar keratoderma, and woolly hair, in an autosomal recessive condition called Naxos disease, because this genetic abnormality can also affect the integrity of the superficial layers of the skin most exposed to pressure stress. ARVC/D is an important cause of ventricular arrhythmias in children and young adults. It is seen predominantly in males, and 30–50% of cases have a familial distribution. Up to 80% of individuals with ARVD present have symptoms like syncope and dyspnea.The remainder frequently present with palpitations or other symptoms due to right ventricular outflow tract (RVOT) tachycardia (a type of monomorphic ventricular tachycardia). Symptoms are usually exercise-related. In populations where hypertrophic cardiomyopathy is screened out prior to involvement in competitive athletics, it is a common cause of sudden cardiac death. The first clinical signs of ARVD are usually during adolescence. However, signs of ARVD have been demonstrated in infants.

* Biliary atresia is a childhood disease of the liver in which one or more bile ducts are abnormally narrow, blocked, or absent. It can be congenital or acquired. Initially, the symptoms of biliary atresia are indistinguishable from those of neonatal jaundice, a usually harmless condition commonly seen in infants. Distinctive symptoms of biliary atresia are usually evident between one and six weeks after birth. Infants and children with biliary atresia develop progressive cholestasis, a condition in which bile is unable to leave the liver and builds up inside of it. When the liver is unable to excrete bilirubin through the bile ducts in the form of bile, bilirubin begins to accumulate in the blood, causing symptoms. These symptoms include yellowing of the skin, itchiness, poor absorption of nutrients (causing delays in growth), pale stools, dark urine, and a swollen abdomen. Eventually, cirrhosis with portal hypertension will develop. If left untreated, biliary atresia can lead to liver failure. Unlike other forms of jaundice, however, biliary-atresia-related cholestasis mostly does not result in kernicterus, a form of brain damage resulting from liver dysfunction. This is because in biliary atresia, the liver, although diseased, is still able to conjugate bilirubin, and conjugated bilirubin is unable to cross the blood–brain barrier.

* Bladder exstrophy is a congenital anomaly that exists along the spectrum of the exstrophy-epispadias complex and most notably involves protrusion of the urinary bladder through a defect in the abdominal wall. Its presentation is variable, often including abnormalities of the bony pelvis, pelvic floor, and genitalia. The underlying embryologic mechanism leading to bladder exstrophy is unknown, though it is thought to be in part due to failed reinforcement of the cloacal membrane by underlying mesoderm. The classic manifestation of bladder exstrophy presents with: A defect in the abdominal wall occupied by both the exstrophied bladder as well as a portion of the urethra. A flattened puborectal sling. Separation of the pubic symphysis. Shortening of the pubic ramii. External rotation of the pelvis. Females frequently have a displaced and

narrowed vaginal orifice, a bifid clitoris, and divergent labia.

* Blepharospasm-oromandibular dystonia or Meige's syndrome is actually a combination of two forms of dystonia, blepharospasm and oromandibular dystonia (OMD). Blepharo means "eyelid". Spasm means "uncontrolled muscle contraction". The term blepharospasm can be applied to any abnormal blinking or eyelid tic or twitch resulting from any cause, ranging from dry eyes to Tourette's syndrome to tardive dyskinesia. The blepharospasm referred to here is officially called benign essential blepharospasm (BEB) to distinguish it from the less serious secondary blinking disorders. "Benign" indicates the condition is not life-threatening, and "essential" is a medical term meaning "of unknown cause". It is both a cranial and a focal dystonia. Cranial refers to the head and focal indicates confinement to one part. The word dystonia describes abnormal involuntary sustained muscle contractions and spasms. Patients with blepharospasm have normal eyes. The visual disturbance is due solely to the forced closure of the eyelids. Oromandibular dystonia (OMD) is a form of focal dystonia that affects varying areas of the head and neck including the lower face, jaw, tongue and larynx. The spasms may cause the mouth to pull open, shut tight, or move repetitively. Speech and swallowing may be distorted. It is often associated with dystonia of the cervical muscles (Spasmodic Torticollis), eyelids (Blepharospasm), or larynx (Spasmodic Dysphonia). The main symptoms involve involuntary blinking and chin thrusting. Some patients may experience excessive tongue protrusion, squinting, light sensitivity, muddled speech, or uncontrollable contraction of the platysma muscle. Some Meige's patients also have "laryngeal dystonia" (spasms of the larynx). Blepharospasm may lead to embarrassment in social situations, and oromandibular dystonia can affect speech, making it difficult to carry on the simplest conversations. This can cause difficulty in both personal and professional contexts, and in some cases may cause patients to withdraw from social situations. The condition tends to affect women more frequently than men. In patients with OMD, involuntary contractions may involve the muscles used for chewing (masticatory muscles). These may include the thick muscle in the cheek that closes the jaw (masseter muscle) and the broad muscle that draws back the lower jaw and closes the mouth (temporalis muscle). Some patients may also experience involuntary contractions of the wide muscle at the side of the neck (platysmal muscle). This muscle draws down the corner of the mouth and lower lip or other muscle groups.

* Cardiospasm (achalasia) is a failure of smooth muscle fibers to relax, which can cause a sphincter to remain closed and fail to open when needed. Without a modifier, "achalasia" usually refers to achalasia of the esophagus, which is also called esophageal achalasia, achalasia cardiae, cardiospasm, and esophageal aperistalsis. Achalasia can happen at various points along the gastrointestinal tract; achalasia of the rectum, for instance, in Hirschsprung's disease. Esophageal achalasia is an esophageal motility disorder involving the smooth muscle layer of the esophagus and the lower esophageal sphincter (LES). It is characterized by incomplete LES relaxation, increased LES tone, and lack of peristalsis of the esophagus (inability of smooth muscle to move food down the esophagus) in the absence of other explanations like cancer or fibrosis. Achalasia is characterized by difficulty in swallowing, regurgitation, and sometimes

chest pain. The most common form is primary achalasia, which has no known underlying cause. It is due to the failure of distal esophageal inhibitory neurons. However, a small proportion occurs secondary to other conditions, such as esophageal cancer or Chagas disease (an infectious disease common in South America). Achalasia affects about one person in 100,000 per year. There is no gender predominance for the occurrence of disease. The main symptoms of achalasia are dysphagia (difficulty in swallowing), regurgitation of undigested food, chest pain behind the sternum, and weight loss. Dysphagia tends to become progressively worse over time and to involve both fluids and solids. Some people may also experience coughing when lying in a horizontal position. The chest pain experienced, also known as cardiospasm and non-cardiac chest pain can often be mistaken for a heart attack. It can be extremely painful in some sufferers. Food and liquid, including saliva, are retained in the esophagus and may be inhaled into the lungs (aspiration).

* Carotid stenosis is a narrowing or constriction of the inner surface (lumen) of the carotid artery, usually caused by atherosclerosis. The carotid artery is the large artery whose pulse can be felt on both sides of the neck under the jaw. On the right side it starts from the brachiocephalic trunk (a branch of the aorta) as the common carotid artery, and on the left side the common carotid artery comes directly off the aortic arch. At the throat it forks into the internal and external carotid arteries. The internal carotid artery supplies the brain, and the external carotid artery supplies the face. This fork is a common site for atherosclerosis, an inflammatory buildup of atheromatous plaque that can narrow the lumen of the common or internal carotid arteries. The plaque can be stable and asymptomatic, or it can be a source of embolization. Emboli break off from the plaque and travel through the circulation to blood vessels in the brain. As the vessel gets smaller, they can lodge in the vessel wall and restrict blood flow to parts of the brain which that vessel supplies. This ischemia can either be temporary, yielding a transient ischemic attack, or permanent resulting in a thromboembolic stroke. Transient ischemic attacks (TIAs) are a warning sign, and are often followed by severe permanent strokes, particularly within the first two days. TIAs by definition last less than 24 hours and frequently take the form of a weakness or loss of sensation of a limb or the trunk on one side of the body, or the loss of sight (amaurosis fugax) in one eye. Less common symptoms are artery sounds (bruits), or ringing in the ears (tinnitus).

* Central cord syndrome (CCS) is the most common form of cervical spinal cord injury. It is characterized by loss of motion and sensation in arms and hands. It usually results from trauma which causes damage to the neck, leading to major injury to the central grey matter of the spinal cord. The syndrome is more common in people over the age of 50 because osteoarthritis in the neck region causes weakening of the vertebrae. CCS most frequently occurs among older persons with cervical spondylosis, however, it also may occur in younger individuals. CCS is the most common incomplete spinal cord injury syndrome. It accounts for approximately 9% of traumatic SCIs. After an incomplete injury, the brain still has the capacity to send and receive some signals below the site of injury. Sending and receiving of signals to and from parts of the body is reduced, not entirely blocked. CCS gives a greater motor loss in the upper limbs than in the lower limbs, with variable sensory loss. It is generally associated with favorable

prognosis for some degree of neurological and functional recovery. However, factors such as age, preexisting conditions, and extent of injury will affect the recovery process. CCS is characterized by disproportionately greater motor impairment in upper compared to lower extremities, and variable degree of sensory loss below the level of injury in combination with bladder dysfunction and urinary retention. This syndrome differs from that of a complete lesion, which is characterized by total loss of all sensation and movement below the level of the injury. In older patients, CCS most often occurs after a hyperextension injury in an individual with long-standing cervical spondylosis. However, this condition is not exclusive to older patients as younger individuals can also sustain an injury leading to CCS. Typically, younger patients are more likely to get CCS as a result of a high-force trauma or a bony instability in the cervical spine.

* Central nervous system diseases, also known as central nervous system disorders, are a group of neurological disorders that affect the structure or function of either the spinal cord or brain, which collectively form the central nervous system (CNS). The spinal cord transmits sensory reception from the peripheral nervous system. It also conducts motor information to the body's skeletal muscles, cardiac muscles, smooth muscles, and glands. There are 31 pairs of spinal nerves along the spinal cord, all of which consist of both sensory and motor neurons. The spinal cord is protected by vertebrae and connects the peripheral nervous system to the brain, and it acts as a "minor" coordinating center. The brain serves as the organic basis of cognition and exerts centralized control over the other organs of the body. The brain is protected by the skull; however, if the brain is damaged, significant impairments in cognition and physiological function or death may occur. There are many central nervous system diseases and conditions, including infections of the central nervous system such as encephalitis and poliomyelitis, early-onset neurological disorders including ADHD and autism, late-onset neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, and essential tremor, autoimmune and inflammatory diseases such as multiple sclerosis and acute disseminated encephalomyelitis, genetic disorders such as Krabbe's disease and Huntington's disease, as well as amyotrophic lateral sclerosis and adrenoleukodystrophy. Lastly, cancers of the central nervous system can cause severe illness and, when malignant, can have very high mortality rates.

* Cheilitis is inflammation of the lips. This inflammation may include the perioral skin (the skin around the mouth), the vermilion border, and/or the labial mucosa. The skin and the vermilion border are more commonly involved, as the mucosa is less affected by inflammatory and allergic reactions. Most cheilitis is caused by exogenous factors such as dryness (chapping) and acute sun exposure. Chapped lips (also cheilitis simplex or common cheilitis) are characterized by cracking, fissuring, and peeling of the skin of the lips, and are one of the most common types of cheilitis. While both lips may be affected, the lower lip is the most common site. There may also be burning or the formation of large, painful cracks when the lips are stretched. If chronic, cheilitis simplex can progress to crusting and bleeding. Perioral dermatitis in a young male with a lip licking habit. Note also deep fissures on lips. Lip licking, biting, or rubbing habits are frequently involved. Paradoxically, constant licking of the lips causes drying and

irritation, and eventually the mucosa splits or cracks. The lips have a greater tendency to dry out in cold, dry weather. Digestive enzymes present in saliva may also irritate the lips, and the evaporation of the water in saliva saps moisture from them. Some children have a habit of sucking and chewing on the lower lip, producing a combination of cheilitis and sharply demarcated perioral erythema (redness).

* Clostridium is a genus of Gram-positive bacteria, which includes several significant human pathogens, including the causative agent of botulism and an important cause of diarrhea, Clostridium difficile. Clostridium contains around 100 species that include common free-living bacteria, as well as important pathogens. The main species responsible for disease in humans are: Clostridium botulinum can produce botulinum toxin in food or wounds and can cause botulism. Clostridium difficile can flourish when other gut flora bacteria are killed during antibiotic therapy, leading to superinfection and potentially fatal pseudomembranous colitis (a severe necrotizing disease of the large intestine). Clostridium perfringens causes a wide range of symptoms, from food poisoning to cellulitis, fasciitis, and gas gangrene. Clostridium tetani causes tetanus. Clostridium sordellii can cause a fatal infection in exceptionally rare cases after medical abortions.

* Cushing's syndrome is a collection of signs and symptoms due to prolonged exposure to cortisol. Signs and symptoms may include: high blood pressure, abdominal obesity but with thin arms and legs, reddish stretch marks, a round red face, a fat lump between the shoulders, weak muscles, weak bones, acne, and fragile skin that heals poorly. Women may have more hair and irregular menstruation. Occasionally there may be changes in mood, headaches, and a chronic feeling of tiredness. Cushing's syndrome is caused by either excessive cortisol-like medication such as prednisone or a tumor that either produces or results in the production of excessive cortisol by the adrenal glands. Cases due to a pituitary adenoma are known as Cushing's disease. It is the second most common cause of Cushing's syndrome after medication. A number of other tumors may also cause Cushing's. Some of these are associated with inherited disorders such as multiple endocrine neoplasia type 1 and Carney complex. Symptoms include rapid weight gain, particularly of the trunk and face with sparing of the limbs (central obesity). Common signs include the growth of fat pads along the collarbone, on the back of the neck ("buffalo hump" or lipodystrophy), and on the face ("moon face"). Other symptoms include excess sweating, dilation of capillaries, thinning of the skin (which causes easy bruising and dryness, particularly the hands) and mucous membranes, purple or red striae (the weight gain in Cushing's syndrome stretches the skin, which is thin and weakened, causing it to hemorrhage) on the trunk, buttocks, arms, legs, or breasts, proximal muscle weakness (hips, shoulders), and hirsutism (facial male-pattern hair growth), baldness and/or extremely dry and brittle hair. In rare cases, Cushing's can cause hypocalcemia. The excess cortisol may also affect other endocrine systems and cause, for example, insomnia, inhibited aromatase, reduced libido, impotence in men, and amenorrhoea/oligomenorrhea and infertility in women due to elevations in androgens. Studies have also shown that the resultant amenorrhea is due to hypercortisolism, which feeds back onto the hypothalamus resulting in decreased levels of GnRH release. Cognitive conditions, including memory and attention dysfunctions, as

well as depression, are commonly associated with elevated cortisol, and may be early indicators of exogenous or endogenous Cushing's. Depression and anxiety disorders are also common. Other striking and distressing skin changes that may appear in Cushing's syndrome include facial acne, susceptibility to superficial fungus (dermatophyte and malassezia) infections, and the characteristic purplish, atrophic striae on the abdomen. Other signs include increased urination (and accompanying increased thirst), persistent high blood pressure (due to cortisol's enhancement of epinephrine's vasoconstrictive effect) and insulin resistance (especially common with ACTH production outside the pituitary), leading to high blood sugar and insulin resistance which can lead to diabetes mellitus. Insulin resistance is accompanied by skin changes such as acanthosis nigricans in the axilla and around the neck, as well as skin tags in the axilla. Untreated Cushing's syndrome can lead to heart disease and increased mortality.

* Diphtheria is an infection caused by the bacterium Corynebacterium diphtheriae. Signs and symptoms may vary from mild to severe. They usually start two to five days after exposure. Symptoms often come on fairly gradually beginning with a sore throat and fever. In severe cases a grey or white patch develops in the throat. This can block the airway and create a barking cough as in croup. The neck may swell in part due to large lymph nodes. A form of diphtheria that involves the skin, eyes, or genitals also exists. Complications may include myocarditis, inflammation of nerves, kidney problems, and bleeding problems due to low blood platelets. Myocarditis may result in an abnormal heart rate and inflammation of the nerves may result in paralysis. Diphtheria is usually spread between people by direct contact or through the air. It may also be spread by contaminated objects. Some people carry the bacteria without having symptoms, but can still spread the disease to others. The symptoms of diphtheria usually begin two to seven days after infection. Symptoms of diphtheria include fever of 38 °C (100.4 °F) or above, chills, fatigue, bluish skin coloration (cyanosis), sore throat, hoarseness, cough, headache, difficulty swallowing, painful swallowing, difficulty breathing, rapid breathing, foul-smelling bloodstained nasal discharge and lymphadenopathy. Symptoms can also include cardiac arrhythmias, myocarditis, and cranial and peripheral nerve palsies. Laryngeal diphtheria can lead to a characteristic swollen neck and throat, or "bull neck". The swollen throat is often accompanied by a serious respiratory condition, characterized by a brassy or "barking" cough, stridor, hoarseness, and difficulty breathing, and historically referred to variously as "diphtheritic croup", "true croup", or sometimes simply as "croup".

* A distichia is an eyelash that arises from an abnormal spot on the eyelid. This abnormality, attributed to a genetic mutation, is known to affect dogs and humans. Distichiae (the abnormal eyelash) usually exit from the duct of the meibomian gland at the eyelid margin. They are usually multiple and sometimes more than one arises from a duct. They can affect either the upper or lower eyelid and are usually bilateral. The lower eyelids of dogs usually have no eyelashes. Distichiae usually cause no symptoms because the lashes are soft, but they can irritate the eye and cause tearing, squinting, inflammation, and corneal ulcers and scarring.

* Encephalopathy is a term for any diffuse disease of the brain that alters brain function or structure. Encephalopathy may be caused by infectious agent (bacteria, virus, or prion), metabolic or mitochondrial dysfunction, brain tumor or increased pressure in the skull, prolonged exposure to toxic elements (including solvents, drugs, radiation, paints, industrial chemicals, and certain metals), chronic progressive trauma, poor nutrition, or lack of oxygen or blood flow to the brain. The hallmark of encephalopathy is an altered mental state. Depending on the type and severity of encephalopathy, common neurological symptoms are progressive loss of memory and cognitive ability, subtle personality changes, inability to concentrate, lethargy, and progressive loss of consciousness. Other neurological symptoms may include myoclonus (involuntary twitching of a muscle or group of muscles), nystagmus (rapid, involuntary eye movement), tremor, muscle atrophy and weakness, dementia, seizures, and loss of ability to swallow or speak.

* End-stage renal disease refers to Stage 5 chronic kidnet disease (CKD); and usually means the patient requires renal replacement therapy, which may involve a form of dialysis, but ideally constitutes a kidney transplant. Previous professional guidelines classified the severity of CKD in five stages, with stage 1 being the mildest and usually causing few symptoms and stage 5 being a severe illness with poor life expectancy if untreated. Chronic kidney disease (CKD), also known as chronic renal disease, is progressive loss in kidney function over a period of months or years. The symptoms of worsening kidney function are not specific, and might include feeling generally unwell and experiencing a reduced appetite. CKD is a long-term form of kidney disease; thus, it is differentiated from acute kidney disease (acute kidney injury) in that the reduction in kidney function must be present for over 3 months. CKD is an internationally recognized public health problem affecting 5–10% of the world population. Chronic kidney disease is identified by a blood test for creatinine, which is a breakdown product of muscle metabolism. Higher levels of creatinine indicate a lower glomerular filtration rate and as a result a decreased capability of the kidneys to excrete waste products. The most common recognised cause of CKD is diabetes mellitus. Others include idiopathic (i.e. unknown cause, often associated with small kidneys on renal ultrasound), hypertension, and glomerulonephritis. Together, these cause about 75% of all adult cases. CKD is initially without specific symptoms and is generally only detected as an increase in serum creatinine or protein in the urine. As the kidney function decreases: Blood pressure is increased due to fluid overload and production of vasoactive hormones created by the kidney via, increasing one's risk of developing hypertension and/or suffering from congestive heart failure. Urea accumulates, leading to azotemia and ultimately uremia (symptoms ranging from lethargy to pericarditis and encephalopathy). Potassium accumulates in the blood (hyperkalemia with a range of symptoms including malaise and potentially fatal cardiac arrhythmias). Erythropoietin synthesis is decreased causing anemia. Fluid volume overload symptoms may range from mild edema to life-threatening pulmonary edema. Hyperphosphatemia, due to reduced phosphate excretion, follows the decrease in glomerular filtration. Hyperphosphatemia is associated with increased cardiovascular risk, being a direct stimulus to vascular calcification. Hypocalcemia, due to 1,25 dihydroxyvitamin D3 deficiency (caused by stimulation of FGF-23 and reduction of renal mass), and resistance to the calcemic

action of parathyroid hormone. Metabolic acidosis (due to accumulation of sulfates, phosphates, uric acid etc.) may cause altered enzyme activity by excess acid acting on enzymes; and also increased excitability of cardiac and neuronal membranes by the promotion of hyperkalemia due to excess acid (acidemia). Acidosis is also due to decreased capacity to generate enough ammonia from the cells of the proximal tubule. Iron deficiency anemia, which increases in prevalence as kidney function decreases, is especially prevalent in those requiring haemodialysis. It is multifactoral in cause, but includes increased inflammation, reduction in erythropoietin, and hyperuricemia leading to bone marrow suppression. Sexual dysfunction is very common in both men and women with CKD. People with CKD suffer from accelerated atherosclerosis and are more likely to develop cardiovascular disease than the general population.

* Episiotomy also known as perineotomy, is a surgical incision of the perineum and the posterior vaginal wall generally done by a midwife or obstetrician during second stage of labor to quickly enlarge the opening for the baby to pass through. Episiotomy is done in an effort to prevent against soft-tissue tearing which may involve the anal sphincter and rectum. Vaginal tears can occur during childbirth, most often at the vaginal opening as the baby's head passes through, especially if the baby descends quickly. Tears can involve the perineal skin or extend to the muscles and the anal sphincter and anus.

* Esophagitis (or oesophagitis) is inflammation of the esophagus. It may be acute or chronic. Acute esophagitis can be catarrhal or phlegmonous, whereas chronic esophagitis may be hypertrophic or atrophic. Symptoms include: Heartburn (pain in chest - retrosternal). Nausea. Postprandial worsening of symptoms. Symptoms may be relieved by antacids. Esophagitis causes symptoms of abdominal pain and vomiting. If not treated, it causes discomfort and scarring of the esophagus. This makes swallowing food more difficult. Forms of infectious esophagitis are typically seen in immunocompromised people. Types include: Fungal due to Candida (Esophageal candidiasis), and viral due to either Herpes simplex (Herpes esophagitis) or Cytomegalovirus. The most common cause is gastroesophageal reflux disease (GERD, or GORD in Standard English). If caused by GERD, the disease is also called reflux esophagitis. Chemical injury by alkaline or acid solutions may also cause esophagitis, and is usually seen in children, or in adults who attempt suicide by ingestion of caustic substances. Physical injury resulting from radiation therapy or by nasogastric tubes may also be responsible. Pill esophagitis. Hyperacidity. Alcohol abuse. Eosinophilic esophagitis is a poorly understood form of esophagitis, which is thought to be related to food allergies. Crohn's disease – a type of IBD which is also an autoimmune disease where the immune system inflames the gastrointestinal tract – can cause esophagitis if it attacks the esophagus. Certain medications, including doxycycline may cause esophagitis if taken incorrectly.

* Fatty liver is a reversible condition wherein large vacuoles of triglyceride fat accumulate in liver cells via the process of steatosis (i.e., abnormal retention of lipids within a cell). Despite having multiple causes, fatty liver can be considered a single disease that occurs worldwide in those with excessive alcohol intake and the obese (with or without effects of insulin resistance). The condition is also associated with other

diseases that influence fat metabolism. When this process of fat metabolism is disrupted, the fat can accumulate in the liver in excessive amounts, thus resulting in a fatty liver. It is difficult to distinguish alcoholic FLD from nonalcoholic FLD, and both show microvesicular and macrovesicular fatty changes at different stages. Accumulation of fat may also be accompanied by a progressive inflammation of the liver (hepatitis), called steatohepatitis. Liver disease with extensive inflammation and a high degree of steatosis often progresses to more severe forms of the disease. Hepatocyte ballooning and necrosis of varying degrees are often present at this stage. Liver cell death and inflammatory responses lead to the activation of hepatic stellate cells, which play a pivotal role in hepatic fibrosis. Defects in fatty acid metabolism are responsible for pathogenesis of FLD, which may be due to imbalance in energy consumption and its combustion, resulting in lipid storage, or can be a consequence of peripheral resistance to insulin, whereby the transport of fatty acids from adipose tissue to the liver is increased. Most individuals are asymptomatic and are usually discovered incidentally because of abnormal liver function tests or hepatomegaly noted in unrelated medical conditions. Elevated liver biochemistry is found in 50% of patients with simple steatosis. The serum alanine transaminase level usually is greater than the aspartate transaminase level in the nonalcoholic variant and the opposite in alcoholic FLD (AST:ALT more than 2:1).

* Fragile X syndrome (FXS) is a genetic disorder. Symptoms often include mild to moderate intellectual disability. Physical features may include a long and narrow face, large ears, flexible fingers, and large testicles. About a third of people have features of autism such as problems with social interactions and delayed speech. Hyperactivity is common and seizures occur in about 10%. Males are usually more affected than females. Fragile X syndrome occurs in about 1 in 4,000 males and 1 in 8,000 females. Most young children do not show any physical signs of FXS. It is not until puberty that physical features of FXS begin to develop. Aside from intellectual disability, prominent characteristics of the syndrome may include an elongated face, large or protruding ears, flat feet, larger testes (macroorchidism), and low muscle tone. Recurrent otitis media (middle ear infection) and sinusitis is common during early childhood. Speech may be cluttered or nervous. Behavioral characteristics may include stereotypic movements (e.g., hand-flapping) and atypical social development, particularly shyness, limited eye contact, memory problems, and difficulty with face encoding. Some individuals with fragile X syndrome also meet the diagnostic criteria for autism. A 2013 review stated that life expectancy for FXS was 12 years lower than the general population and that the causes of death were similar to those found for the general population.

* Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract. GISTs arise in the smooth muscle pacemaker interstitial cell of Cajal, or similar cells. Most (66%) occur in the stomach and gastric GISTs have a lower malignant potential than tumors found elsewhere in the GI tract. GISTs may present with trouble swallowing, gastrointestinal bleeding, or metastases (mainly in the liver). Intestinal obstruction is rare, due to the tumor's outward pattern of growth. Often, there is a history of vague abdominal pain or discomfort, and the tumor has become rather large by time the diagnosis is made. GISTs are tumors of connective

tissue, i.e. sarcomas; unlike most gastrointestinal tumors, they are nonepithelial. About 70% occur in the stomach, 20% in the small intestine and less than 10% in the esophagus. Small tumors are generally benign, especially when cell division rate is slow, but large tumors disseminate to the liver, omentum and peritoneal cavity. They rarely occur in other abdominal organs. GISTs occur in 10-20 per one million people. The true incidence might be higher, as novel laboratory methods are much more sensitive in diagnosing GISTs. The estimated incidence of GIST in the United States is approximately 5000 cases annually. This makes GIST the most common form of sarcoma, which constitutes more than 70 types of cancer. The majority of GISTs present at ages 50–70 years. Across most of the age spectrum, the incidence of GIST is similar in men and women. Adult GISTs are rare before age 40. Pediatric GISTs are considered to be biologically distinct. Unlike GISTs at other ages, pediatric GISTs are more common in girls and young women.

* Glomerulonephritis (GN), also known as glomerular nephritis, is a term used to refer to several kidney diseases (usually affecting both kidneys). Many of the diseases are characterised by inflammation either of the glomeruli or of the small blood vessels in the kidneys, hence the name, but not all diseases necessarily have an inflammatory component. As it is not strictly a single disease, its presentation depends on the specific disease entity: it may present with isolated hematuria and/or proteinuria (blood or protein in the urine); or as a nephrotic syndrome, a nephritic syndrome, acute kidney injury, or chronic kidney disease. Primary causes are intrinsic to the kidney. Secondary causes are associated with certain infections (bacterial, viral or parasitic pathogens), drugs, systemic disorders (SLE, vasculitis), or diabetes. Glomerulonephritis refers to an inflammation of the glomerulus, which is the unit involved in filtration in the kidney. This inflammation typically results in one or both of the nephrotic or nephritic syndromes. The nephrotic syndrome is characterised by the finding of edema in a person with increased protein in the urine and decreased protein in the blood, with increased fat in the blood. The nephritic syndrome is characterised by blood in the urine (especially Red blood cell casts with dysmorphic red blood cells) and a decrease in the amount of urine in the presence of hypertension. Nonproliferative glomerulonephritis is characterised by forms of glomerulonephritis in which the number of cells is not changed. These forms usually result in the nephrotic syndrome. Proliferative glomerulonephritis is characterised by an increased number of cells in the glomerulus. These forms usually present with a triad of blood in the urine, decreased urine production, and hypertension, the nephritic syndrome. These forms usually progress to end-stage kidney failure (ESKF) over weeks to years (depending on type).

* Hereditary sensory and autonomic neuropathy type I (HSAN I) or hereditary sensory neuropathy type I (HSN I) is a group of autosomal dominant inherited neurological diseases that affect the peripheral nervous system particularly on the sensory and autonomic functions. The hallmark of the disease is the marked loss of pain and temperature sensation in the distal parts of the lower limbs. The autonomic disturbances, if present, manifest as sweating abnormalities. HSAN I is characterized by marked sensory disturbances mainly as the loss of pain and temperature sensation in the distal parts of the lower limbs. The loss of sensation can also extend to the proximal

parts of the lower limbs and the upper limbs as the disease progresses. Some affected individuals do not lose sensation, but instead experience severe shooting, burning, and lancinating pains in the limbs or in the trunk. Autonomic disturbances, if present, manifest as decreased sweating. The degree of motor disturbances is highly variable, even within families, ranging from absent to severe distal muscle weakness and wasting. The disease progresses slowly, but often disables the affected individuals severely after a long duration. The onset of the disease varies between the 2nd and 5th decade of life, albeit congenital or childhood onset has occasionally been reported. With the progression of the disease, the affected individuals lose the ability to feel pain in their feet and legs. Minor injuries in the painless area can result in slow-healing wounds which, if not immediately recognized, can develop into chronic ulcerations. Once infection occurs, these ulcerations can result in severe complications that lead to foot deformity, such as inflammation of the underlying bones, spontaneous bone fractures, and progressive degeneration of weight-bearing joints. Furthermore, foot deformity promotes skin changes such as hyperkeratosis at pressure points. These complications may necessitate amputation of the affected foot.

* Hereditary sensory and autonomic neuropathy type II (HSAN2) is a condition that primarily affects the sensory nerve cells (sensory neurons), which transmit information about sensations such as pain, temperature, and touch. These sensations are impaired in people with HSAN2. In some affected people, the condition may also cause mild abnormalities of the autonomic nervous system, which controls involuntary body functions such as heart rate, digestion, and breathing. The signs and symptoms of HSAN2 typically begin in infancy or early childhood. The first sign of HSAN2 is usually numbness in the hands and feet. Soon after, affected individuals lose the ability to feel pain or sense hot and cold. People with HSAN2 often develop open sores (ulcers) on their hands and feet. Because affected individuals cannot feel the pain of these sores, they may not seek treatment right away. Without treatment, the ulcers can become infected and may lead to amputation of the affected area. Unintentional self-injury is common in people with HSAN2, typically by biting the tongue, lips, or fingers. These injuries may lead to spontaneous amputation of the affected areas. Affected individuals often have injuries and fractures in their hands, feet, limbs, and joints that go untreated because of the inability to feel pain. Repeated injury can lead to a condition called Charcot joints, in which the bones and tissue surrounding joints are destroyed. The effects of HSAN2 on the autonomic nervous system are more variable. Some infants with HSAN2 have trouble sucking, which makes it difficult for them to eat. People with HSAN2 may experience episodes in which breathing slows or stops for short periods (apnea); digestive problems such as the backflow of stomach acids into the esophagus (gastroesophageal reflux); or slow eye blink or gag reflexes. Affected individuals may also have weak deep tendon reflexes, such as the reflex being tested when a doctor taps the knee with a hammer. Some people with HSAN2 lose a type of taste bud on the tip of the tongue called lingual fungiform papillae and have a diminished sense of taste. Type 2, congenital sensory neuropathy (also historically known as Morvan's disease), is characterized by onset of symptoms in early infancy or childhood. Upper & lower extremities are affected with chronic ulcerations and multiple injuries to fingers and feet. Pain sensation is affected predominantly and deep tendon reflexes are reduced.

Autoamputation of the distal phalanges is common and so is neuropathic joint degeneration. The NCV shows reduced or absent sensory nerve action potentials and nerve biopsy shows total loss of myelinated fibers and reduced numbers of unmyelinated fibers. It is inherited as an autosomal recessive condition.

* Hereditary sensory and autonomic neuropathy type IV also called Congenital insensitivity to pain with anhidrosis (CIPA), is an extremely rare inherited disorder of the nervous system which prevents the sensation of pain, heat, cold, or any real nerve-related sensations (including feeling the need to urinate); however, patients can still feel pressure. CIPA is the fourth type of hereditary sensory and autonomic neuropathy (HSAN), known as HSAN IV. (It is also referred to as HSAN Type IV). A person with CIPA cannot feel pain or differentiate even extreme temperatures. "Anhidrosis" means the body does not sweat, and "congenital" indicates that the condition is present from birth. People with this disorder are very likely to injure themselves in ways that would normally be prevented by feeling pain. For example, a patient could burn themselves severely and not even notice. The main features of the disorder are lack of pain sensation, painless injuries of the arms, legs and oral structures, hyperthermia during hot weather because of inability to sweat, syndromic intellectual disability as a result of hyperthermia, infection and scarring of the tongue, lips and gums, chronic infections of bones and joints, bone fractures, multiple scars, osteomyelitis and joint deformities, which may lead to amputation. Other common problems are eye related, such as infection due to the sufferers rubbing them too hard, too frequently or scratching them during sleep. In addition, patients typically lack unmyelinated and small myelinated nerve fibers in the dorsal root ganglion. Both are responsible for transmitting pain signals. In addition, patients' sweat glands are normal in both structure and function, though they lack innervations by small diameter neurons. CIPA is caused by a genetic mutation which prevents the formation of nerve cells which are responsible for transmitting signals of pain, heat, and cold to the brain. The disorder is autosomal recessive. It does not appear to have any particular ethnic distribution, though it is more prevalent in cultures in which intermarriage is an accepted practice. Overheating kills more than half of all children with CIPA before age 3.

* Hereditary sensory and autonomic neuropathy type V (HSAN5) is a condition that primarily affects the sensory nerve cells (sensory neurons), which transmit information about sensations such as pain, temperature, and touch. These sensations are impaired in people with HSAN5. The signs and symptoms of HSAN5 appear early, usually at birth or during infancy. People with HSAN5 lose the ability to feel pain, heat, and cold. Deep pain perception, the feeling of pain from injuries to bones, ligaments, or muscles, is especially affected in people with HSAN5. Because of the inability to feel deep pain, affected individuals suffer repeated severe injuries such as bone fractures and joint injuries that go unnoticed. Repeated trauma can lead to a condition called Charcot joints, in which the bones and tissue surrounding joints are destroyed. Type 5, congenital insensitivity to pain with partial anhidrosis, also manifests with congenital insensitivity to pain & anhidrosis. There is a selective absence of small myelinated fibers differentiating it from Type IV (CIPA).

* Hydatidiform mole or Molar pregnancy is an abnormal form of pregnancy in which a non-viable fertilized egg implants in the uterus and will fail to come to term. A molar pregnancy is a gestational trophoblastic disease which grows into a mass in the uterus that has swollen chorionic villi. These villi grow in clusters that resemble grapes. A molar pregnancy can develop when a fertilized egg does not contain an original maternal nucleus. The products of conception may or may not contain fetal tissue. It is characterized by the presence of a hydatidiform mole (or hydatid mole, mola hydatidosa). Molar pregnancies are categorized as partial moles or complete moles, with the word mole being used to denote simply a clump of growing tissue, or a growth. Complete hydatidiform moles have 2.5% risk of developing into choriocarcinoma, but also a 10% chance of becoming an invasive mole. Incomplete moles can become invasive (<5% risk) but are not associated with choriocarcinoma. Complete hydatidiform moles account for 50% of all cases of choriocarcinoma. Molar pregnancies usually present with painless vaginal bleeding in the fourth to fifth month of pregnancy. The uterus may be larger than expected, or the ovaries may be enlarged. There may also be more vomiting than would be expected (hyperemesis). Sometimes there is an increase in blood pressure along with protein in the urine. Blood tests will show very high levels of human chorionic gonadotropin (hCG). The cause of this condition is not completely understood. Potential risk factors may include defects in the egg, abnormalities within the uterus, or nutritional deficiencies. Women under 20 or over 40 years of age have a higher risk. Other risk factors include diets low in protein, folic acid, and carotene. An hydatidiform mole is a pregnancy/conceptus in which the placenta contains grapelike vesicles (small sacs) that are usually visible with the naked eye. The vesicles arise by distention of the chorionic villi by fluid. When inspected in the microscope, hyperplasia of the trophoblastic tissue is noted. If left untreated, a hydatidiform mole will almost always end as a spontaneous abortion (miscarriage). Hydatidiform moles are a common complication of pregnancy, occurring once in every 1000 pregnancies in the US, with much higher rates in Asia (e.g. up to one in 100 pregnancies in Indonesia). In rare cases a hydatidiform mole co-exists in the uterus with a normal, viable fetus. Under careful surveillance it is often possible for the woman to give birth to the normal child and to be cured of the mole.

* Hyperthyroidism is the condition that occurs due to excessive production of thyroid hormone by the thyroid gland. Thyrotoxicosis is the condition that occurs due to excessive thyroid hormone of any cause and therefore includes hyperthyroidism. Some, however, use the terms interchangeably. Signs and symptoms vary between people and may include irritability, muscle weakness, sleeping problems, a fast heartbeat, heat intolerance, diarrhea, enlargement of the thyroid, and weight loss. Symptoms are typically less in the old and during pregnancy. An uncommon complication is thyroid storm in which an event such as an infection results in worsening symptoms such as confusion and a high temperature and often results in death. Graves' disease is the cause of about 50% to 80% of the cases of hyperthyroidism in the United States. Other causes include multinodular goiter, toxic adenoma, inflammation of the thyroid, eating too much iodine, and too much synthetic thyroid hormone. A less common cause is a pituitary adenoma. Neurological manifestations can include tremors, chorea, myopathy, and in some susceptible individuals (in particular of Asian descent) periodic paralysis.

Exophthalmos (protrusion of the eyeball), occurs specifically and uniquely in hyperthyroidism caused by Graves' disease (note that not all exophthalmos is caused by Graves' disease, but when present with hyperthyroidism is diagnostic of Graves' disease).

* Iritis is the inflammation of the anterior chamber and iris. Iridocyclitis presents the same symptoms as iritis, but also includes inflammation in the ciliary body. Anterior uveitis includes both iridocyclitis and iritis. Anywhere from two-thirds to 90% of uveitis cases are anterior in location. This condition can occur as a single episode and subside with proper treatment or may take on a recurrent or chronic nature. Common symptoms of Anterior uveitis: Burning of the eye. Redness of the eye. Blurred vision. Photophobia or sensitivity to light. Irregular pupil. Blacked out sclera. Floaters, which are dark spots that float in the visual field. Headaches. Signs of anterior uveitis include dilated ciliary vessels, presence of cells and flare in the anterior chamber, and keratic precipitates ("KP") on the posterior surface of the cornea. In severe inflammation there may be evidence of a hypopyon (inflammatory cells in the anterior chamber of the eye). Old episodes of uveitis are identified by pigment deposits on lens, KPs, and festooned pupil on dilation of pupil. Busacca nodules, inflammatory nodules located on the surface of the iris in granulomatous forms of anterior uveitis such as Fuchs heterochromic iridocyclitis (FHI). Synechia (eye condition where the iris adheres to either the cornea or lens).

* Iron-deficiency anemia is anemia caused by a lack of iron. Anemia is defined as a decrease in the number of red blood cells or the amount of hemoglobin in the blood. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath or poor ability to exercise. Anemia that comes on quickly often has greater symptoms which may include: confusion, feeling like one is going to pass out, and increased thirst. There needs to be significant anemia before a person becomes noticeably pale. There may be additional symptoms depending on the underlying cause. It is caused by insufficient dietary intake and absorption of iron, or iron loss from bleeding. Bleeding can be from a range of sources such as the intestinal, uterine or urinary tract. The most common cause of iron-deficiency anemia in children in developing countries is parasitic worms. Worms cause intestinal bleeding, which is not always noticeable in feces, and is especially damaging to children. Malaria, hookworms and vitamin A deficiency contribute to anemia during pregnancy in most underdeveloped countries. In women over 50 years old, the most common cause of iron-deficiency anemia is chronic gastrointestinal bleeding from nonparasitic causes, such as gastric ulcers, duodenal ulcers or gastrointestinal cancer. Iron deficiency causes approximately half of all anemia cases worldwide, and affects women more often than men. Iron-deficiency anemia is characterized by the sign of pallor (reduced oxyhemoglobin in skin or mucous membranes), and the symptoms of fatigue, lightheadedness, and weakness. None of the symptoms are sensitive or specific. Because iron deficiency tends to develop slowly, adaptation occurs and the disease often goes unrecognized for some time, even years; patients often adapt to the systemic effects that anemia causes. In severe cases, dyspnea (trouble breathing) can occur. Unusual obsessive food cravings, known as pica, may develop. Pagophagia or pica for ice has been suggested to be

specific, but is actually neither a specific or sensitive symptom, and is not helpful in diagnosis. When present, it may (or may not) disappear with correction of iron-deficiency anemia.

* Cystic kidney disease refers to a wide range of hereditary, developmental, and acquired conditions. With the inclusion of neoplasms with cystic changes, over 40 classifications and subtypes have been identified. Depending on the disease classification, the presentation of disease may be from birth, or much later into adult life. Cystic disease may involve one or both kidneys and may or may not occur in the presence of other anomalies. A higher incidence of cystic kidney disease is found in the male population and prevalence increases with age. Renal cysts have been reported in more than 50% of patients over the age of 50. Typically, cysts grow up to 2.88 mm annually and cause related pain and/or hemorrhage. A renal cyst or kidney cyst, is a fluid collection in or on the kidney. There are several types based on the Bosniak classification. The majority are benign, simple cysts that can be monitored and not intervened upon. However, some are cancerous or are suspicious for cancer and are commonly removed in a surgical procedure called nephrectomy. Numerous renal cysts are seen in the cystic kidney diseases, which include polycystic kidney disease and medullary sponge kidney. Up to 27 percent of individuals greater than 50 years of age may have simple renal cysts that cause no symptoms.

* Kidney stone disease, also known as urolithiasis, is when a solid piece of material (kidney stone) occurs in the urinary tract. Kidney stones typically form in the kidney and leave the body in the urine stream. A small stone may pass without causing symptoms. If a stone grows to more than 5 millimeters (0.2 in) it can cause blockage of the ureter resulting in severe pain in the lower back or abdomen. A stone may also result in blood in the urine, vomiting, or painful urination. About half of people will have another stone within ten years. Most stones form due to a combination of genetics and environmental factors. Risk factors include high urine calcium levels, obesity, certain foods, some medications, calcium supplements, hyperparathyroidism, gout and not drinking enough fluids. Stones form in the kidney when minerals in urine are at high concentration. In those who have had stones, prevention is by drinking fluids such that more than two liters of urine is produced per day. Between 1% and 15% of people globally are affected by kidney stones at some point in their life. The hallmark of a stone that obstructs the ureter or renal pelvis is excruciating, intermittent pain that radiates from the flank to the groin or to the inner thigh. This pain, known as renal colic, is often described as one of the strongest pain sensations known. Renal colic caused by kidney stones is commonly accompanied by urinary urgency, restlessness, hematuria, sweating, nausea, and vomiting. It typically comes in waves lasting 20 to 60 minutes caused by peristaltic contractions of the ureter as it attempts to expel the stone. The embryological link between the urinary tract, the genital system, and the gastrointestinal tract is the basis of the radiation of pain to the gonads, as well as the nausea and vomiting that are also common in urolithiasis. Postrenal azotemia and hydronephrosis can be observed following the obstruction of urine flow through one or both ureters. Pain in the lower left quadrant can sometimes be confused with diverticulitis because the sigmoid colon overlaps the ureter and the exact location of the pain may be difficult to isolate due to

the close proximity of these two structures. Dehydration from low fluid intake is a major factor in stone formation. Obesity is a leading risk factor as well. High dietary intake of animal protein, sodium, refined sugars, fructose and high fructose corn syrup, oxalate, grapefruit juice, and apple juice may increase the risk of kidney stone formation. Kidney stones can result from an underlying metabolic condition, such as distal renal tubular acidosis, Dent's disease, hyperparathyroidism, primary hyperoxaluria, or medullary sponge kidney. 3–20% of people who form kidney stones have medullary sponge kidney. Kidney stones are more common in people with Crohn's disease; Crohn's disease is associated with hyperoxaluria and malabsorption of magnesium.

* Primary lateral sclerosis (PLS) is a rare neuromuscular disease characterized by progressive muscle weakness in the voluntary muscles. PLS belongs to a group of disorders known as motor neuron diseases. Motor neuron diseases develop when the nerve cells that control voluntary muscle movement degenerate and die, causing weakness in the muscles they control. PLS only affects upper motor neurons. There is no evidence of the degeneration of spinal motor neurons or muscle wasting (amyotrophy) that occurs in amyotrophic lateral sclerosis (ALS). Onset of PLS usually occurs spontaneously after age 50 and progresses gradually over a number of years, or even decades. The disorder usually begins in the legs, but it may start in the tongue or the hands. Symptoms may include difficulty with balance, weakness and stiffness in the legs, and clumsiness. Other common symptoms are spasticity (involuntary muscle contraction due to the stretching of muscle. Muscle contraction is dependent on the velocity of the stretch) in the hands, feet, or legs, foot dragging, and speech and swallowing problems due to involvement of the facial muscles. Breathing may also become compromised in the later stages of the disease, causing those patients who develop ventilatory failure to require noninvasive ventilatory support. Hyperreflexia is another key feature of PLS as seen in patients presenting with the Babinski's sign. Some people present with emotional lability and bladder urgency, and occasionally people with PLS experience mild cognitive changes detectable on neuropsychological testing, particularly on measures of executive function. The issue of whether PLS exists as a different entity from ALS is not clear, as some patients initially diagnosed as having PLS ultimately develop lower motor neuron signs. Primary lateral sclerosis (PLS) usually presents with gradual-onset, progressive, lower-extremity stiffness and pain due to muscle spasticity. Onset is often asymmetrical. Although the muscles do not appear to atrophy as in ALS (at least initially), the disabling aspect of PLS is muscle spasticity and cramping, and intense pain when those muscles are stretched, resulting in joint immobility. A normal walking stride may become a tiny step shuffle with related instability and falling.

* Left ventricular hypertrophy (LVH) is thickening of the heart muscle of the left ventricle of the heart, that is, left-sided ventricular hypertrophy. While ventricular hypertrophy occurs naturally as a reaction to aerobic exercise and strength training, it is most frequently referred to as a pathological reaction to cardiovascular disease, or high blood pressure. It is one aspect of ventricular remodeling. While LVH itself is not a disease, it is usually a marker for disease involving the heart. Disease processes that can cause LVH include any disease that increases the afterload that the heart has to contract

against, and some primary diseases of the muscle of the heart. Causes of increased afterload that can cause LVH include aortic stenosis, aortic insufficiency and hypertension. Primary disease of the muscle of the heart that cause LVH are known as hypertrophic cardiomyopathies, which can lead into heart failure. Long-standing mitral insufficiency also leads to LVH as a compensatory mechanism. The enlargement is not permanent in all cases, and in some cases the growth can regress with the reduction of blood pressure. LVH may be a factor in determining treatment or diagnosis for other conditions. For example, LVH causes a patient to have an irregular ECG.

* Lymphedema is a condition of localized fluid retention and tissue swelling caused by a compromised lymphatic system, which normally returns interstitial fluid to the thoracic duct, then the bloodstream. The condition can be inherited or can be caused by a birth defect, though it is frequently caused by cancer treatments and by parasitic infections. Symptoms may include a feeling of heaviness or fullness, edema, and (occasionally) aching pain in the affected area. In advanced lymphedema, there may be the presence of skin changes such as discoloration, verrucous (wart-like) hyperplasia, hyperkeratosis and papillomatosis; and eventually deformity (elephantiasis). Lymphedema should not be confused with edema arising from venous insufficiency, which is not lymphedema. However, untreated venous insufficiency can progress into a combined venous/lymphatic disorder which is treated the same way as lymphedema. Lymphedema affects approximately 140 million people worldwide. Lymphedema may be inherited (primary) or caused by injury to the lymphatic vessels (secondary). It is most frequently seen after lymph node dissection, surgery and/or radiation therapy, in which damage to the lymphatic system is caused during the treatment of cancer, most notably breast cancer. In many patients with cancer, this condition does not develop until months or even years after therapy has concluded. Lymphedema may also be associated with accidents or certain diseases or problems that may inhibit the lymphatic system from functioning properly. In tropical areas of the world, a common cause of secondary lymphedema is filariasis, a parasitic infection. It can also be caused by a compromising of the lymphatic system resulting from cellulitis.

* Macroglobulinemia is the presence of increased levels of macroglobulins in the circulating blood. It is a plasma cell dyscrasia, resembling leukemia, with cells of lymphocytic, plasmacytic, or intermediate morphology, which secrete a monoclonal immunoglobulin M component. There is diffuse infiltration by the malignant cells of the bone marrow and also, in many cases, of the spleen, liver, or lymph nodes. The circulating macroglobulin can produce symptoms of hyperviscosity syndrome: weakness, fatigue, bleeding disorders, and visual disturbances. Peak incidence of macroglobulinemia is in the sixth and seventh decades of life.

* Macular corneal dystrophy is a rare pathological condition affecting the stroma of cornea. The first signs are usually noticed in the first decade of life, and progress afterwards, with opacities developing in the cornea and attacks of pain. Onset occurs in the first decade, usually between ages 5 and 9. The disorder is progressive. Minute, gray, punctate opacities develop. Corneal sensitivity is usually reduced. Painful attacks with photophobia, foreign body sensations, and recurrent erosions occur in most

patients.

* Mitochondrial myopathies are a group of neuromuscular diseases caused by damage to the mitochondria—small, energy-producing structures that serve as the cells' "power plants." Nerve cells in the brain and muscles require a great deal of energy, and thus appear to be particularly damaged when mitochondrial dysfunction occurs. The symptoms of mitochondrial myopathies include muscle weakness or exercise intolerance, heart failure or rhythm disturbances, dementia, movement disorders, stroke-like episodes, deafness, blindness, droopy eyelids, limited mobility of the eyes, vomiting, and seizures. The prognosis for these disorders ranges in severity from progressive weakness to death. Most mitochondrial myopathies occur before the age of 20, and often begin with exercise intolerance or muscle weakness. During physical activity, muscles may become easily fatigued or weak. Muscle cramping is rare, but may occur. Nausea, headache, and breathlessness are also associated with these disorders.

* Myeloproliferative disorders (MPDs), also myeloproliferative neoplasms (MPNs) are a group of diseases of the bone marrow in which excess cells are produced. They are related to, and may evolve into, myelodysplastic syndrome and acute myeloid leukemia, although the myeloproliferative diseases on the whole have a much better prognosis than these conditions. The increased numbers of blood cells may not cause any symptoms, but a number of medical problems or symptoms may occur. The risk of thrombosis is increased in some types of MPN. All MPNs arise from precursors of the myeloid lineages in the bone marrow. The lymphoid lineage may produce similar diseases, the lymphoproliferative disorders (acute lymphoblastic leukemia, lymphomas, chronic lymphocytic leukemia and multiple myeloma). Though myeloproliferative disorders are serious, and may pose certain health risks, people with these conditions often live for many years after diagnosis. The prognosis largely depends on the type of disorder. Many people with myeloproliferative disorders have no symptoms when their doctors first make the diagnosis. One symptom shared by all myeloproliferative disorders, with the exception of essential thrombocytosis, is an enlarged spleen. An enlarged spleen can cause abdominal pain and a feeling of fullness. Myeloproliferative disorders include: Polycythemia vera. Occurs when the bone marrow produces too many blood cells, especially red blood cells. More than 95% of people with polycythemia vera carry the blood mutation JAK2V617F. Essential thrombocytosis. Occurs when the body produces too many platelet cells, which help blood to clot. Clots can block blood vessels leading to heart attack or stroke. Primary or idiopathic myelofibrosis, also known as myelosclerosis. Occurs when the bone marrow produces too much collagen or fibrous tissue in the bone marrow. This reduces bone marrow's ability to produce blood cells. Chronic myelogenous leukemia (CML). Cancer of the bone marrow that produces abnormal granulocytes, a type of white blood cell, in the bone marrow.

* A myxoma is a myxoid tumor of primitive connective tissue. Myxomas are the most common type of primary heart tumor. The tumor is derived from multipotential mesenchymal cells and may cause a ball valve-type obstruction. About 75% of myxomas occur in the left atrium of the heart, usually beginning in the wall that divides

the two upper chambers of the heart. The rest are in the right atrium, rarely in the left ventricle. Right atrial myxomas are sometimes associated with tricuspid stenosis and atrial fibrillation. Symptoms may occur at any time, but most often they accompany a change of body position. Pedunculated myxomas can have a "wrecking ball effect", as they lead to stasis and may eventually embolize themselves. A cutaneous myxoma, AKA superficial angiomyxoma, consists of a multilobulated myxoid mass containing stellate or spindled fibroblasts with pools of mucin forming cleft-like spaces. There is often a proliferation of blood vessels and an inflammatory infiltrate. Clinically, it may present as solitary or multiple flesh-colored nodules on the face, trunk, or extremities. It may occur as part of the Carney complex, and is sometimes the first sign. Local recurrence is common. The odontogenic myxoma is an uncommon benign odontogenic tumor arising from embryonic connective tissue associated with tooth formation. As a myxoma, this tumor consists mainly of spindle shaped cells and scattered collagen fibers distributed through a loose, mucoid material. Odontogenic myxomas have been found in patients ranging in age between 10 and 50 years, however, they are most commonly diagnosed in young adults (specifically between 25 and 35 years of age). The mandible is more likely to be affected than the maxilla. The region between the molar and premolar is the site of most common occurrence for multilocular lesions while the anterior portion of the mouth favors a smaller, unilocular variety.

* A nevus flammeus, port-wine stain or firemark, is almost always a birthmark; in rare cases it can develop in early childhood. It is caused by a vascular anomaly (a capillary malformation in the skin). Port-wine stains are named for their coloration, which is similar in color to Port-wine, a fortified red wine from Portugal. Port-wine stains ordinarily persist throughout life. The area of skin affected grows in proportion to general growth. Port-wine stains occur most often on the face but can appear anywhere on the body, particularly on the neck and upper trunk. Early stains are usually flat and pink in appearance. As the child matures, the color may deepen to a dark red or purplish color. In adulthood, thickening of the lesion or the development of small lumps may occur. Port-wine stains may be part of a syndrome such as Sturge–Weber syndrome or Klippel–Trénaunay–Weber syndrome. In the absence of successful treatment, hypertrophy (increased tissue mass) of the stains may cause problems later in life, such as loss of function (especially if the stain is near the eye or mouth), bleeding, and increasing disfigurement. Lesions on or near the eyelid can be associated with glaucoma. If the port-wine stain is on the face or other highly visible part of the body, its presence can also cause emotional and social problems for the affected person.

* Osteitis deformans or Paget's disease of bone is caused by the excessive breakdown and formation of bone, followed by disorganized bone remodeling. This causes affected bone to weaken, resulting in pain, misshapen bones, fractures and arthritis in the joints near the affected bones. Rarely, it can develop into a primary bone cancer known as Paget's sarcoma. Often Paget's disease is localized to only a few bones in the body. The pelvis, femur, and lower lumbar vertebrae are the most commonly affected bones. Paget's disease typically is localized, affecting just one or a few bones, as opposed to osteoporosis, for example, which usually affects all the bones in the body. A later phase of the disease is characterized by the replacement of normal bone marrow with highly

vascular fibrous tissue. Paget's disease affects from 1.5 to 8.0 percent of the population, depending on age and country of residence. Paget's disease is rare in people less than 55 years of age. Men are more commonly affected than women. Many people with Paget's disease do not know they have the disease, because they have a mild case with no symptoms. In addition, when symptoms do occur, they may be confused with those of arthritis or other disorders. In other cases, the diagnosis is made only after complications have developed. About 35 percent of patients with Paget's have symptoms related to the disease when they are first diagnosed. The first manifestation of Paget's disease is usually an elevated alkaline phosphatase in the blood. Overall, the most common symptom is bone pain. Loss of hearing in one or both ears may occur when Paget's disease affects the skull and the bone that surrounds the inner ear. Treating the disease may slow or stop hearing loss. In rare cases, involvement of the skull may lead to compression of the nerves that supply the eye, leading to vision loss. Paget's may also cause gross deformities in the bones. Paget's disease is a frequent component of multisystem proteinopathy. Paget's disease may lead to other medical conditions, including: Arthritis, Cardiovascular disease, Kidney stones, Nervous system problems, Angioid streaks, and loose teeth. (See also below Paget Disease Of Bone).

* POEMS syndrome is an extremely rare multisystem disorder. POEMS is an acronym that stands for (P)olyneuropathy, disease affecting many nerves; (O)rganomegaly, abnormal enlargement of an organ; (E)ndocrinopathy, disease affecting certain hormone-producing glands that help to regulate sexual function, and certain metabolic functions; (M)onoclonal gammopathy or M proteins; and (S)kin abnormalities. Common symptoms include progressive weakness of the nerves in the legs and arms, an abnormally enlarged liver and/or spleen (hepatosplenomegaly), enlarged lymph nodes, abnormally darkening of the skin (hyperpigmentation), thickening of the skin and excessive hair growth (hypertrichosis). Endocrine abnormalities such as failure of the ovaries and testes (gonads) to function properly (primary gonadal failure) and diabetes mellitus may be present. Specific endocrine abnormalities associated with POEMS syndrome vary from case to case. Other important features of the disease include swelling around the optic nerve (papilledema), abnormal fluid retention, which may occur in the ankles (edema), the abdominal cavity (ascites), or around the lungs (pleural effusions), painless scars on bone x-ray (osteosclerosis), and an elevated platelet count (a blood cell responsible for clotting). Some patients may also have abnormalities in the lung function tests, which may not be noticed because of their inability to walk well due to their neuropathy.

* Paget disease of bone, another set. See above Osteitis deformans.

* Paget's disease of the breast is a type of cancer that outwardly may have the appearance of eczema, with skin changes involving the nipple of the breast. The condition is an uncommon disease accounting for 1 to 4.3% of all breast cancers. The condition in itself often appears innocuous, limited to a surface appearance and it is sometimes dismissed, although actually indicative of underlying breast cancer. Paget's disease of the breast can affect the nipple and areola. Symptoms typically only affect one breast. Symptoms may include: Skin. The first symptom is usually an eczema-like

rash. The skin of the nipple and areola may be red, itchy and inflamed. After a period of time, the skin may become flaky or scaly. Discharge. A discharge, which may be straw-colored or bloody, may ooze from the area. Sensation. Some women have a burning sensation. These symptoms usually occur in more advanced stages, when serious destruction of the skin often prompts the patient to consult. Lumps or masses in the breast occur in 50% of the patients. In more advanced stages, the disease may cause tingling, increased sensitivity and pain. Nipple changes. The nipple may turn inwards (be inverted). Breast changes. There may or may not be a lump in the breast, and there may be redness, oozing and crusting, and a sore that does not heal. The symptoms usually affect the nipple and then spread to the areola and then the breast. It is common for the symptoms to wax and wane.

* Pantothenate kinase-associated neurodegeneration (PKAN) is a degenerative disease of the brain that can lead to parkinsonism, dystonia, dementia, and ultimately death. Neurodegeneration in PKAN is accompanied by an excess of iron that progressively builds up in the brain. Symptoms typically begin in childhood and are progressive, often resulting in death by early adulthood. Symptoms of PKAN begin before middle childhood, and most often are noticed before ten years of age. Symptoms include: Dystonia (repetitive uncontrollable muscle contractions that may cause jerking or twisting of certain muscle groups). Dysphagia & dysarthria due to muscle groups involved in speech being involved. Rigidity/stiffness of limbs. Tremor. Writhing movements. Dementia. Spasticity. Weakness. Seizures (rare). Toe walking. Retinitis pigmentosa, another degenerative disease that affects the individual's retina, often causing alteration of retinal color and progressive deterioration of the retina at first causing night blindness and later resulting in a complete loss of vision. 25% of individuals experience an uncharacteristic form of PKAN that develops post-10 years of age and follows a slower, more gradual pace of deterioration than those pre-10 years of age. These individuals face significant speech deficits as well as psychiatric and behavioral disturbances. Being a progressive, degenerative nerve illness, PKAN leads to early immobility and often death by early adulthood. Death occurs prematurely due to infections such as pneumonia, as the disease in itself is technically not life limiting.

* A paraganglioma is a rare neuroendocrine neoplasm that may develop at various body sites (including the head, neck, thorax and abdomen). About 97% are benign and cured by surgical removal; the remaining 3% are malignant because they are able to produce distant metastases. Paragangliomas originate from cells of the orthosympathetic system, they are closely related to pheochromocytomas, which however are chromaffin-positive. Most paragangliomas are either asymptomatic or present as a painless mass. While all contain neurosecretory granules, only in 1–3% of cases is secretion of hormones such as catecholamines abundant enough to be clinically significant; in that case manifestations often resemble those of pheochromocytomas (intra-medullary paraganglioma). About 75% of paragangliomas are sporadic; the remaining 25% are hereditary (and have an increased likelihood of being multiple and of developing at an earlier age). The paragangliomas appear grossly as sharply circumscribed polypoid masses and they have a firm to rubbery consistency. They are highly vascular tumors and may have a deep red color. About 85% of paragangliomas develop in the abdomen;

only 12% develop in the chest and 3% in the head and neck region (the latter are the most likely to be symptomatic). While most are single, rare multiple cases occur (usually in a hereditary syndrome).

* Pharingeal diseases. Pain in the throat/ (sore throat) is a very common phenomenon. Like this, there are many other common symptoms prevails which are caused by various pharyngeal diseases. Common symptoms of of pharyngeal diseases are the following: Pain in the throat/ sore throat. (Tonsillitis, pharyngitis, quinsy, ulcer, tumours). Pain in the EAR (Referred otalgia) (tonsillitis, pharyngitis, quinsy, post tonsillectomy). Trismus (due to quinsy or extension of tumours to pterygoid muscles). Dysphagia: Three types of dysphagia exists. a. True dysphagia: real difficulty in swallowing food, resulting in food coming back, slow eating, loss of weight, food sticks in the throat. (Carcinoma oesophagus, stricture oesophagus). b. Feeling of lump in the throat due to spasms of cricopharyngeus secondary to stress, acid reflux, pharyngeal pouch, pressure from big thyroid, cervical osteophytes or an early synmptom of throat cancer. c. Odynophagia (painful deglutition). Regurgitation of recently eaten food (Pharyngeal pouch, achalasia)Muffled speech (quinsy, retropharyngeal abscess, acute epiglottitis). Nasal speech (nasopharyngeal mass). Neck lumps (any metastatic neck nodes).

* Pleural disease is a generic term for a number of conditions that can impact the pleura – the membrane that covers both the outside of the lungs and that lines the chest cavity wall. Pleural mesothelioma is a lethal form of pleural disease, but it is only one example. It is caused by the presence of asbestos fibers embedded in the pleural membranes, which eventually cause the development of abnormal cells. Pleural Effusion is a relatively common medical condition, estimated to be diagnosed up to one million times annually in the United States. It is the accumulation of excessive fluid in the chest cavity, specifically the area between the pleura, which puts pressure on the lungs causing chest pain and reduced breathing capacity. It can be caused by a thickened or inflamed pleura or by the development of other diseases such as congestive heart failure, mesothelioma, pneumonia, a pulmonary embolism or cirrhosis. Pneumothorax is the accumulation of air in the pleural cavity, generally caused by trauma or some sort of respiratory failure that allows leakage of air into the chest. Pleural plaques are fibrous, benign tumors that develop on the pleura, often caused by the presence of asbestos. Over time these fibrous growths calcify. While it is possible for people who develop this condition to later develop mesothelioma cancer, in many cases pleural plaques go unnoticed. Pleurisy is an inflammation of the pleura most often brought on by an infection. When the inflamed and thickened membranes rub together as the lungs expand it can be a very painful condition. Pleural effusion is by far the most common pleural affliction. For some people this condition at least initially, is asymptomatic. However it is often a symptom of its own, and as it worsens can manifest several additional conditions. A dry, persistent cough may develop along with shortness of breath, caused by the pressure on the lungs. If there is congestive heart failure or a thickening pleura caused by mesothelioma, those conditions may contribute to the breathing difficulty as well.

* Right ventricular hypertrophy (RVH) is a form of ventricular hypertrophy affecting the

right ventricle. Blood travels through the right ventricle to the lungs via the pulmonary arteries. If conditions occur which decrease pulmonary circulation, meaning blood does not flow well from the heart to the lungs, extra stress can be placed on the right ventricle. This can lead to right ventricular hypertrophy. It can affect ECG findings. An ECG with right ventricular hypertrophy may or may not show a right axis deviation on the graph. Common causes include: Pulmonary hypertension, Tetralogy of Fallot, pulmonary valve stenosis, pulmonic regurgitation, ventricular septal defect (VSD), high altitude, cardiac fibrosis, chronic obstructive pulmonary disease (COPD), athletic heart syndrome.

* Erectile dysfunction (ED) or impotence is sexual dysfunction characterized by the inability to develop or maintain an erection of the penis during sexual activity in humans. A penile erection is the hydraulic effect of blood entering and being retained in sponge-like bodies within the penis. The process is most often initiated as a result of sexual arousal, when signals are transmitted from the brain to nerves in the penis. The most important organic causes of impotence are cardiovascular disease and diabetes, neurological problems (for example, trauma from prostatectomy surgery), hormonal insufficiencies (hypogonadism) and drug side effects.

* Spinocerebellar ataxia type 3 (SCA3) also known as Machado–Joseph disease (MJD), is a rare autosomal dominantly inherited neurodegenerative disease that causes progressive cerebellar ataxia, which results in a lack of muscle control and coordination of the upper and lower extremities. Some symptoms, such as clumsiness and rigidity, make MJD commonly mistaken for drunkenness or Parkinson's disease. Machado–Joseph disease is a type of spinocerebellar ataxia and is the most common cause of autosomal-dominant ataxia. MJD causes ophthalmoplegia and mixed sensory and cerebellar ataxia. Symptoms of MJD are memory deficits, spasticity, difficulty with speech and swallowing, weakness in arms and legs, clumsiness, frequent urination and involuntary eye movements. Symptoms can begin in early adolescence and they get worse over time. Eventually, MJD leads to paralysis; however, intellectual functions usually remain the same. The pons (a structure located on the brain stem) is one of the areas affected by MJD. The striatum (a brain area connected to balance and movement) is also affected by this disease, which could explain both of the main motor problems cause by MJD: the tightening and twisting of the limb and the abrupt, irregular movements.

* Thyroid hormone resistance describes a rare syndrome in which the thyroid hormone levels are elevated but the thyroid stimulating hormone (TSH) level is not suppressed, or not completely suppressed as would be expected. Hypothalamus secretes a hormone called thyrotropin releasing hormone (TRH) which in turn release thyroid stimulating hormone (TSH). TSH signals thyroid to secrete thyroid hormones thyroxine (T4) and triiodothyronine (T3). T4 gets converted to active T3 in peripheral tissues with the help of deiodinase enzymes. T3 negatively feedback on the pituitary and decreases TSH secretion. Normal thyroid hormone function requires normal thyroid hormone transport across cell membrane, appropriate deiodination, thyroid hormone nuclear receptor, thyroid hormone response elements, co-activators, co-repressors, and normal

histone acetylation. Any abnormalities in this chain can result in thyroid hormone resistance. Thyroid hormone resistance syndrome is rare, incidence is variously quoted as 1 in 50,000 or 1 in 40,000 live births. More than 1000 individuals have been identified with thyroid hormone resistance, of which 85% had thyroid hormone beta receptor mutation. The syndrome can present with variable symptoms, even between members of the same family harboring the same mutation. Typically most or all tissues are resistant to thyroid hormone, so despite raised measures of serum thyroid hormone the individual may appear euthyroid (have no symptoms of over- or underactivity of the thyroid gland). The most common symptoms are goiter and tachycardia. It has also been linked to some cases of attention deficit hyperactivity disorder (ADHD), although the majority of people with that diagnosis have no thyroid problems. An association with depression has been proposed.

* Tricuspid atresia is a form of congenital heart disease whereby there is a complete absence of the tricuspid valve. Therefore, there is an absence of right atrioventricular connection. This leads to a hypoplastic (undersized) or absent right ventricle. This defect is contracted during prenatal development, when the heart does not finish developing. It causes the heart to be unable to properly oxygenate the rest of the blood in the body. Because of this, the body does not have enough oxygen to live, so other defects must occur to maintain blood flow. Because of the lack of an A-V connection, an atrial septal defect (ASD) must be present to fill the left ventricle with blood. Also, since there is a lack of a right ventricle there must be a way to pump blood into the pulmonary arteries, and this is accomplished by a ventricular septal defect (VSD). The causes of Tricupsid atresia are unknown. An atrial septal defect (ASD) and a ventricular septal defect (VSD) must both be present to maintain blood flow-from the right atrium, the blood must flow through the ASD to the left atrium to the left ventricle and through the VSD to the right ventricle to allow access to the lungs. Clinical manifestations are: Progressive cyanosis. Poor feeding. Tachypnea over the first 2 weeks of life. Holosystolic murmur due to the VSD. Left axis deviation on electrocardiography and left ventricular hypertrophy (since it must pump blood to both the pulmonary and systemic systems). Normal heart size.

1.1.22 RTS-14

https://archive.org/details/Resonant_Therapy_Sessions_14

Adenovirus Infections, Alexander Disease, Arthritis Juvenile Chronic, Biotinidase Deficiency, Bronchopulmonary Dysplasia, Bunyavirus Infections, Campylobacter Infections, Cancer-Gallbladder, Cancer-Lymphoma T-Cell, Cancer-Metastasis Squamous, Cancer-Mycosis Fungoides, Cancer-Squamous Cell Carcinoma, Cancer-Vaginal, Cerebral Concussion, Chalazion, Cholelithiasis, Cryptorchidism, Cubital Tunnel Syndrome, Cysticercosis, Dermatitis Herpetiform, Desmoid, Ebstein Anomaly, Enlarged Liver, Exophtalmic Goiter, Familial Motor Neuron Disease, Freeman-Sheldon Syndrome, Gastrointestinal Post-Surgery, Granuloma Annulare, Hantavirus Infections,

Hematospermia, Hematuria, Hemoptysis, Hemorrhage Cranial Epidural, Ileocolitis, Impetigo, Intestinal Neuronal Dysplasia, Ischemic Heart Disease, Lipoma, Livedo Reticularis Systemic, Lung Abscess, Lung Collapse, Lymphangioma, Microphtalmos, Mitral Click-Murmur, Multicystic-Dysplastic Kidney, Multiple Myeloma, Myelodysplastic Syndromes, Myocarditis, Non-Hodgkin Lymphoma, Parapsoriasis, Parasite General Comprehensive, Pericardial Effusion, Pericardial Tamponade, Pharyngeal Diverticulum, Phlebitis, Pleural Effusion, Pulmonary Embolism, Salpingitis, Spondylolisthesis, Testicular Feminization,

* Adenovirus infections most commonly cause illness of the respiratory system; however, depending on the infecting serotype, they may also cause various other illnesses and presentations. Apart from respiratory involvement, illnesses and presentations of adenovirus include gastroenteritis, conjunctivitis, cystitis, and rash illness. Symptoms of respiratory illness caused by adenovirus infection range from the common cold syndrome to pneumonia, croup, and bronchitis. Patients with compromised immune systems are especially susceptible to severe complications of adenovirus infection. Acute respiratory disease (ARD), first recognized among military recruits during World War II, can be caused by adenovirus infections during conditions of crowding and stress. Pharyngoconjunctival fever is a specific presentation of adenovirus infection, manifested as: high fever that lasts 4–5 days, pharyngitis (sore throat), conjunctivitis (inflamed eyes, usually without pus formation like pink eye), enlargement of the lymph nodes of the neck, headache, malaise, and weakness. It usually occurs in the age group 5–18. It is often found in summer camps and during the spring and fall in schools. Although epidemiologic characteristics of the adenoviruses vary by type, all are transmitted by direct contact, fecal-oral transmission, and occasionally waterborne transmission. Several adenoviruses, including Ad5, Ad9, Ad31, Ad36, Ad37, and SMAM1, have at least some evidence of causation of obesity in animals, adipogenesis in cells, and/or association with human obesity. Adenovirus can cause severe necrotizing pneumonia in which all or part of a lung has increased translucency radiographically, which is called Swyer-James Syndrome. Severe adenovirus pneumonia also may result in bronchiolitis obliterans, a subacute inflammatory process in which the small airways are replaced by scar tissue, resulting in a reduction in lung volume and lung compliance.

* Alexander disease is a rare disorder of the nervous system. It is one of a group of disorders, called leukodystrophies, that involve the destruction of myelin. Myelin is the fatty covering that insulates nerve fibers and promotes the rapid transmission of nerve impulses. If myelin is not properly maintained, the transmission of nerve impulses could be disrupted. As myelin deteriorates in leukodystrophies such as Alexander disease, nervous system functions are impaired. Most cases of Alexander disease begin before age 2 and are described as the infantile form. Signs and symptoms of the infantile form typically include an enlarged brain and head size (megalencephaly), seizures, stiffness in the arms and/or legs (spasticity), intellectual disability, and developmental delay. Less frequently, onset occurs later in childhood (the juvenile form) or in adulthood. Common

problems in juvenile and adult forms of Alexander disease include speech abnormalities, swallowing difficulties, seizures, and poor coordination (ataxia). Rarely, a neonatal form of Alexander disease occurs within the first month of life and is associated with severe intellectual disability and developmental delay, a buildup of fluid in the brain (hydrocephalus), and seizures. Alexander disease is also characterized by abnormal protein deposits known as Rosenthal fibers. These deposits are found in specialized cells called astroglial cells, which support and nourish other cells in the brain and spinal cord (central nervous system).

* Chronic juvenile arthritis is not a disease in itself. Also known as juvenile arthritis, this is an umbrella term used to describe the many autoimmune and inflammatory conditions or pediatric rheumatic diseases that can develop in children under the age of 16. Although the various types of juvenile arthritis share many common symptoms, like pain, joint swelling, redness and warmth, each type of juvenile arthritis is distinct and has its own special concerns and symptoms. Some types of juvenile arthritis affect the musculoskeletal system, but joint symptoms may be minor or nonexistent. Juvenile arthritis can also involve the eyes, skin, muscles and gastrointestinal tract.

* Biotinidase Deficiency is caused by the lack of an enzyme called biotinidase. This disorder can lead to seizures, developmental delay, eczema, and hearing loss. Infants with biotinidase deficiency appear normal at birth, but develop critical symptoms after the first weeks or months of life. Symptoms include hypotonia, ataxia, seizures, developmental delay, alopecia, seborrheic dermatitis, hearing loss and optic nerve atrophy. Metabolic acidosis can result in coma and death. The gene defect for biotinidase deficiency is unknowingly passed down from generation to generation. This faulty gene only emerges when two carriers have children together and pass it to their offspring. For each pregnancy of two such carriers, there is a 25% chance that the child will be born with the disease and a 50% chance the child will be a carrier for the gene defect. Studies show that 1 of every 60,000 live births will have biotinidase deficiency.

* Bronchopulmonary dysplasia (BPD), formerly chronic lung disorder of infants and children. It is more common in infants with low birth weight and those who receive prolonged mechanical ventilation to treat respiratory distress syndrome (RDS). It results in significant morbidity and mortality. Prolonged high oxygen delivery in premature infants causes necrotizing bronchiolitis and alveolar septal injury, with inflammation and scarring. Feeding problems are common in infants with BPD, often due to prolonged intubation. Such infants often display oral-tactile hypersensitivity (also known as oral aversion). Physical findings: hypoxemia; hypercapnia; crackles, wheezing, & decreased breath sounds; increased bronchial secretions; hyperinflation; frequent lower respiratory infections; delayed growth & development; enlargement and failure of the right ventricle of the heart; chest X ray shows with hyperinflation, low diaphragm, atelectasis, cystic changes.

* Bunyaviridae is a family of negative-stranded, enveloped RNA viruses. Though generally found in arthropods or rodents, certain viruses in this family occasionally infect humans. Some of them also infect plants. Bunyaviridae are vector-borne viruses. With

the exception of Hantaviruses, all viruses in the Bunyaviridae family are transmitted by arthropods (mosquitos, tick, or sandfly). Hantaviruses are transmitted through contact with deer mice feces. Incidence of infection is closely linked to vector activity, for example, mosquito-borne viruses are more common in the summer. Human infections with certain Bunyaviridae, such as Crimean-Congo hemorrhagic fever virus, are associated with high levels of morbidity and mortality. They are also the cause of severe fever with thrombocytopenia syndrome. Hanta virus or Hantavirus Hemorrhagic fever, common in Korea, Scandinavia, Russia, and western North America, is associated with high fever, lung edema and pulmonary failure. Mortality is around 55%. The antibody reaction plays an important role in decreasing levels of viremia. Bunyaviruses that cause disease in humans include: California encephalitis virus, Hantavirus, Crimean-Congo hemorrhagic fever, Rift Valley fever, Bwamba Fever and, Severe fever with thrombocytopenia syndrome. Bunyaviruses have segmented genomes, making them capable of rapid recombination and increasing the risk of outbreak. Bunyaviridae are transmitted by hematophagous arthropods including mosquitoes, midges, flies, and ticks. The viral incubation period is about 48 hours. Symptomatic infection typically causes nonspecific flulike symptoms with fever lasting for about three days. Because of their nonspecific symptoms, Bunyavirus infections are frequently mistaken for other illnesses.

* Campylobacter species are widely distributed in most warm-blooded animals. They are prevalent in food animals such as poultry, cattle, pigs, sheep and ostriches; and in pets, including cats and dogs. The bacteria have also been found in shellfish. The main route of transmission is generally believed to be foodborne, via undercooked meat and meat products, as well as raw or contaminated milk. Contaminated water or ice is also a source of infection. A proportion of cases occur following contact with contaminated water during recreational activities. Campylobacteriosis is a zoonosis, a disease transmitted to humans from animals or animal products. Most often, carcasses or meat are contaminated by Campylobacter from faeces during slaughtering. In animals, Campylobacter seldom causes disease. Every year almost 1 in 10 people fall ill and 33 million of healthy life years are lost. Foodborne diseases can be severe, especially for young children. Diarrhoeal diseases are the most common illnesses resulting from unsafe food, with 550 million people falling ill yearly (including 220 million children under the age of 5 years). Campylobacter is 1 of the 4 key global causes of diarrhoeal diseases. Campylobacter infections are generally mild, but can be fatal among very young children, elderly, and immunosuppressed individuals. The onset of disease symptoms usually occurs 2 to 5 days after infection with the bacteria, but can range from 1 to 10 days. The most common clinical symptoms of Campylobacter infections include diarrhoea (frequently bloody), abdominal pain, fever, headache, nausea, and/or vomiting. The symptoms typically last 3 to 6 days. Complications such as bacteraemia (presence of bacteria in the blood), hepatitis, pancreatitis (infections of liver and pancreas, respectively), and miscarriage have been reported with various degrees of frequency. Post-infection complications may include reactive arthritis (painful inflammation of the joints which can last for several months) and neurological disorders such as Guillain-Barré syndrome, a polio-like form of paralysis that can result in respiratory and severe neurological dysfunction in a small number of cases.

* Cerebral concussion, also known as minor head trauma or mild traumatic brain injury (mTBI) is the most common type of traumatic brain injury. It is typically defined as a head injury with a temporary loss of brain function. Symptoms include a variety of physical, cognitive, and emotional symptoms, which may not be recognized if subtle. A variety of signs accompany concussion including headache, feeling in a fog, and emotional changeability. Physical signs (such as loss of consciousness or amnesia), behavioral changes (such as irritability), cognitive impairment (such as slowed reaction times), or sleep disturbances. Fewer than 10% of sports-related concussions among children are associated with loss of consciousness. The brain is surrounded by cerebrospinal fluid, which protects it from light trauma. More severe impacts, or the forces associated with rapid acceleration, may not be absorbed by this cushion.

* A chalazion is a common condition affecting the eyelid and is caused by a blockage of a gland in the eyelid. The swelling (cyst) is usually felt as a small lump. Rarely, it can become infected. A chalazion is a small (2-8 mm) fluid-filled swelling (cyst) in the eyelid. It is common and sometimes called a meibomian cyst or tarsal cyst. A chalazion is more common on the upper eyelid. It is possible to have several at once, in more than one eyelid. It is not the same as a stye. Chalazion is more common in people who have the eye condition blepharitis, or skin conditions such as eczema. The usual symptom is a small lump which develops on an eyelid. Sometimes it causes mild pain or irritation, particularly if it has just started - this usually settles. Rarely, it gets infected. It then becomes more swollen, red and painful. Sight is not affected, although very occasionally it can become big enough to press on the eyeball and distort vision.

* Cholelithiasis is the presence of one or more calculi (gallstones) in the gallbladder. In developed countries, about 10% of adults and 20% of people > 65 yr have gallstones. Gallstones tend to be asymptomatic. The most common symptom is biliary colic; gallstones do not cause dyspepsia or fatty food intolerance. More serious complications include cholecystitis; biliary tract obstruction (by stones in the bile ducts [choledocholithiasis]), sometimes with infection (cholangitis); and gallstone pancreatitis. About 80% of people with gallstones are asymptomatic. The remainder have symptoms ranging from a characteristic type of pain (biliary colic) to cholecystitis to life-threatening cholangitis. Biliary colic is the most common symptom. Stones occasionally traverse the cystic duct without causing symptoms. However, most gallstone migration leads to cystic duct obstruction, which, even if transient, causes biliary colic. Biliary colic characteristically begins in the right upper quadrant but may occur elsewhere in the abdomen. It is often poorly localized, particularly in diabetics and the elderly. The pain may radiate into the back or down the arm. Episodes begin suddenly, become intense within 15 min to 1 h, remain at a steady intensity (not colicky) for up to 12 h (usually < 6 h), and then gradually disappear over 30 to 90 min, leaving a dull ache. The pain is usually severe enough to send patients to the emergency department for relief. Nausea and some vomiting are common, but fever and chills do not occur unless cholecystitis has developed. Mild right upper quadrant or epigastric tenderness may be present; peritoneal findings are absent. Between episodes, patients feel well.

* Cryptorchidism refers to an undescended testicle is a testicle that has not moved into the scrotum, the bag of skin that hangs behind the penis, before a baby is born. It is estimated that 3 percent to 4 percent of full-term boys and 21 percent of male infants born preterm are born with this feature. Usually, only one testicle is affected, but 10 percent of all cases, both testicles are affected. Undescended testicle (UDT) is one of the most common endocrine problems affecting newborn males, and it is the most common genital condition that is identified at birth. It is more likely to affect boys who are born prematurely. Whether it affects one or both testicles, cryptorchidism generally corrects itself within a few months. But testicles won't drop on their own after 3 months of age. Thus, about 1 or 2 out of 100 boys with undescended testicles will need treatment.The testicles (or "testes") are 2 organs that hang in a pouch-like skin sac (the scrotum) below the penis. The testicles are where sperm and testosterone (the male sex hormone) are made. The scrotum keeps the testicles in a cooler setting than the body. This is because sperm can't grow at body temperature. During childhood, sperm in the testicles go through a process that results in mature sperm at puberty. Normal testicles form early in a baby boy's growth. They form in the lower belly (abdomen), but descend, or "drop," into the scrotum toward the end of pregnancy. Normal testicles attach themselves with stretchable tissue in the bottom of the scrotum. This is controlled by the baby's normal hormones. It's important not to confuse undescended testicles with "retractile" testicles. After 6 months of age, a male child has a reflex that temporarily pulls the testicles up to protect them when he's cold or frightened.

* Cubital Tunnel Syndrome is a medical condition that is referred by most medical practitioners as ulnar nerve entrapment. The condition is brought by the increase pressure on the ulnar nerve (nerve that is situated alongside the ulna bone). The path along the cubital tunnel is obstructed, thus causing for the syndrome. The compression can lead to the sensations of pins or needles in a person’s fingers. Cubital tunnel syndrome is a common condition to those people who are exposed to long periods of bending ones elbows. Those who commonly flex their elbows on a hard surface are made prone to such condition. Those who have a clear damage to their elbows are believed to be at risk for developing such condition. According to reports, the condition greatly affects men than women. The presenting symptoms of the disease process truly depend on the nerve that has been affected. Here are the following presenting symptoms of cubital tunnel syndrome: Numbness or tingling sensation of the pinky and some part of the ring ringer. The back of the hand shall also radiate with tingling sensation. Others would describe the sensation as pins and needles being inflicted in the areas or sometimes referred as funny bone. Late stage would present for the curling up of the pinky and ring finger. This is believed to be a sign of a great nerve affectation. Pain may also accompany the discomfort. The condition is primarily caused by the constriction of the ulnar nerve as environmental factors assist in doing so. This is mostly associated with the increase exposure of the elbow from hard surfaces and from its increased flexion and extension movements. Increasing pressure at the ulnar nerve can precipitate to the development of the condition. Frequent bending of the elbow does pave a way for developing cubital tunnel syndrome. Because of this, depletion of the purpose of the ulnar nerve is attained.

* Cysticercosis is an infection caused by tapeworm eggs. If people consume improperly cooked meat containing the parasite, they can acquire this tapeworm infection. When the eggs enter the body, they form cysts, usually in the brain, but sometimes in the muscles or eyes. The eggs that cause cysticercosis are passed through the bowel movements of a person infected with the tapeworm. If feces get on food, in water, or on the hands, eggs can be swallowed. The eggs then hatch in the stomach, enter the blood through the intestines, and stick in the brain, muscles, or eyes. A specific form called neurocysticercosis, which affects the brain, can cause neurological symptoms. Cysticercosis is a disease that affects the muscles of infected animals. The livestock species that are more commonly impacted are cattle and pigs. Both the tapeworm infection, also known as taeniasis, and cysticercosis occur globally. Taenia solium tapeworm eggs are the cause of 30% of epilepsy cases in many endemic areas where people and roaming pigs live in close proximity. More than 80% of the world's 50 million people who are affected by epilepsy live in low and lower-middle income countries.

* Dermatitis herpetiformis leads to the development of itchy blisters and bumps on different parts of the body such as elbows, buttocks, kne es and back. It is an autoimmune disease. Medical research suggests that in Dermatitis Herpetiformis wheat intolerance is the main cause. This disease is caused when gluten in the intestinal tract sticks to some antibodies and starts spreading in the bloodstream. As the gluten rises to the skin surface, burning and itching symptoms arise. Eventually, papules emerge over the skin. The word ""Herpetiformis" commonly leads to the misconception that the Herpes Virus, which causes skin ailments, is the cause of this disease. But the use of the term is not because of Herpes involvement. It is a reference to the fact that the blisters appearing in this disease appears similar to those arising in skin conditions. In Dermatitis Herpetiformis Herpes Virus has no role to play. The disease is mainly caused by gluten sensitivity in the small bowel. It mainly develops in people who suffer from Celiac Disease, also known as Coeliac Disease. Celiac Disease is marked by the inability of the sufferer to endure gluten or wheat protein. In Dermatitis Herpetiformis Gluten Sensitivity is the main reason for the rise of all symptoms. The disease is mainly characterized by extreme itchiness. The development of rashes or blisters on the body is another prominent symptom of this condition. Dermatitis Herpetiformis gluten rashes are chronic which indicates that they remain on the skin surface for a long time. Usually, these rashes arise on different parts of the body and are of the same shape and size. Generally, the blisters are seen to appear together in a cluster. These are white or pink in appearance and the surrounding skin becomes red in color. Patients of this disorder also suffer from a burning sensation in the blisters that arise on their body. Scratching the papules can make them burst. In Dermatitis Herpetiformis weight loss may also happen in a few cases. However, the drop in body weight is not immediately apparent.

* A desmoid tumor is an abnormal growth that arises from connective tissue, which is the tissue that provides strength and flexibility to structures such as bones, ligaments, and muscles. Typically, a single tumor develops, although some people have multiple tumors. The tumors can occur anywhere in the body. Tumors that form in the abdominal wall are called abdominal desmoid tumors; those that arise from the tissue that connects the abdominal organs are called intra-abdominal desmoid tumors; and tumors

found in other regions of the body are called extra-abdominal desmoid tumors. Extra-abdominal tumors occur most often in the shoulders, upper arms, and upper legs. Desmoid tumors are fibrous, much like scar tissue. They are generally not considered cancerous (malignant) because they do not spread to other parts of the body (metastasize); however, they can aggressively invade the surrounding tissue and can be very difficult to remove surgically. These tumors often recur, even after apparently complete removal. The most common symptom of desmoid tumors is pain. Other signs and symptoms, which are often caused by growth of the tumor into surrounding tissue, vary based on the size and location of the tumor. Intra-abdominal desmoid tumors can block the bowel, causing constipation. Extra-abdominal desmoid tumors can restrict the movement of affected joints and cause limping or difficulty moving the arms or legs.

* Ebstein's anomaly is a malformed heart valve that does not properly close to keep the blood flow moving in the right direction. Blood may leak back from the lower to upper chambers on the right side of the heart. This syndrome also is commonly seen with an atrial septal defect, or ASD (or a hole in the wall dividing the two upper chambers of the heart). It accounts for less than 1% of cases of congenital heart diseases. The anomaly is more common in twins and in those with a family history of congenital heart disease. Environmental factors found in studies include maternal exposure to benzodiazepines. Ebstein's anomaly presents with a spectrum of congenital abnormalities of the tricuspid valve and the right ventricle. Additional associated anomalies include bicuspid aortic valves, pulmonary atresia or hypoplastic pulmonary artery, subaortic stenosis, coarctation of the aorta, mitral valve prolapse, accessory mitral valve tissue or muscle bands of the left ventricle, ventricular septal defects and pulmonary stenosis. Presentation is often between the ages of 10 and 30 years but it can present at various stages of life. Common symptoms are: Cyanosis, often transient in neonatal life with recurrence in adult life but may appear for the first time in adult life. In adult life, cyanosis progressively worsens and may be transiently increased due to paroxysmal arrhythmias. Fatigue and dyspnoea due to right ventricular failure and decreased left ventricular ejection fraction. Palpitations and sudden cardiac death due to paroxysmal supraventricular tachycardia or fatal ventricular arrhythmias.

* Hepatomegaly is the condition of having an enlarged liver. It is a non-specific medical sign having many causes, which can broadly be broken down into infection, hepatic tumours, or metabolic disorder. Often, hepatomegaly will present as an abdominal mass. Depending on the cause, it may sometimes present along with jaundice. Symptoms having to do with hepatomegaly can include several, among them the individual may experience some weight loss, poor appetite and lethargy (jaundice and bruising may also be present). The mechanism of hepatomegaly consists of vascular swelling, inflammation (due to the various causes that are infectious in origin) and deposition of non-hepatic cells or increased cell contents (such due to iron in hemochromatosis or hemosiderosis and fat in fatty liver disease).

* Exophtalmic goiter or Graves' disease is an immune system disorder that results in the overproduction of thyroid hormones (hyperthyroidism). Although a number of disorders may result in hyperthyroidism, Graves' disease is a common cause. Because thyroid

hormones affect a number of different body systems, signs and symptoms associated with Graves' disease can be wide ranging and significantly influence your overall well-being. Although Graves' disease may affect anyone, it's more common among women and before the age of 40. Common signs and symptoms of Graves' disease include: Anxiety and irritability, A fine tremor of your hands or fingers, Heat sensitivity and an increase in perspiration or warm, moist skin, Weight loss, despite normal eating habits, Enlargement of your thyroid gland (goiter), Change in menstrual cycles, Erectile dysfunction or reduced libido, Frequent bowel movements, Bulging eyes (Graves' ophthalmopathy), Thick, red skin usually on the shins or tops of the feet (Graves' dermopathy), Rapid or irregular heartbeat (palpitations).

* Familial motor neuron disease (FMND) constitutes approximately 5%–10% of cases of motor neuron disease (MND). Whilst in most families the pattern of inheritance is consistent with an autosomal-dominant trait, with age-dependent penetrance, a few cases appear to show an autosomal-recessive mode of inheritance. Statistical analysis shows that the likelihood of chance aggregation is improbable because affected members span several generations, come from different environmental and geographical regions, and the condition does not develop in spouses. The familial and sporadic forms are clinically indistinguishable, so it is likely that a common abnormality may be present in both. A motor neuron disease (MND) is any of several neurological disorders that selectively affect motor neurons, the cells that control voluntary muscles of the body. They include amyotrophic lateral sclerosis (ALS), primary lateral sclerosis (PLS), progressive muscular atrophy (PMA), progressive bulbar palsy (PBP) and pseudobulbar palsy; spinal muscular atrophies are also sometimes included in the group. They are neurodegenerative in nature and cause increasing disability and eventually, death.

* Freeman-Sheldon syndrome is a condition that primarily affects the face, hands, and feet. People with this disorder have a distinctive facial appearance including a small mouth (microstomia) with pursed lips, giving the appearance of a "whistling face." People with Freeman-Sheldon syndrome may also have a prominent forehead and brow ridges, a sunken appearance of the middle of the face, a short nose, a long area between the nose and mouth, deep folds in the skin between the nose and lips, full cheeks, and a chin dimple shaped like an "H" or "V". Affected individuals may have a number of abnormalities that affect the eyes. Other facial features that may occur in Freeman-Sheldon syndrome include an unusually small tongue and jaw and a high arch in the roof of the mouth. People with this disorder may have difficulty swallowing, a failure to gain weight and grow at the expected rate, and respiratory complications that may be life-threatening. Speech problems are also common in this disorder. Some affected individuals have hearing loss. Freeman-Sheldon syndrome is also characterized by joint deformities that restrict movement. People with this disorder typically have multiple contractures in the hands and feet at birth. These contractures lead to permanently bent fingers and toes, and inward- and downward-turning feet. Affected individuals may also have a spine that curves to the side. People with Freeman-Sheldon syndrome also have an increased risk of developing a severe reaction to certain drugs used during surgery and other invasive procedures. This

reaction is called malignant hyperthermia. Malignant hyperthermia occurs in response to some anesthetic gases, which are used to block the sensation of pain. If given these drugs, people at risk for malignant hyperthermia may experience muscle rigidity, breakdown of muscle fibers, a high fever, increased acid levels in the blood and other tissues, and a rapid heart rate. Intelligence is unaffected in most people with Freeman-Sheldon syndrome, but approximately one-third have some degree of intellectual disability.

* Granuloma annulare is a benign, asymptomatic, self-limited papular eruption found in patients of all ages. The primary skin lesion usually is grouped papules in an enlarging annular shape, with color ranging from flesh-colored to erythematous. These lesions can be very unsightly, but normally cause no additional symptoms and don't have any lasting influence on an individual's health. But, granuloma annulare is hard to deal with if the lesions affect the appearance. The two most common types of granuloma annulare are localized, which typically is found on the lateral or dorsal surfaces of the hands and feet; and disseminated, which is widespread. Localized disease generally is self-limited and resolves within one to two years, whereas disseminated disease lasts longer with some having a chronic course lasting up to 10 years.

* Hantaviruses are single-stranded, enveloped, negative sense RNA viruses in the Bunyaviridae family which can kill humans. They normally infect rodents and do not cause disease in these hosts. Humans may become infected with hantaviruses through contact with rodent urine, saliva, or feces. Some strains of hantaviruses cause potentially fatal diseases in humans, such as hantavirus hemorrhagic fever with renal syndrome (HFRS) and hantavirus pulmonary syndrome (HPS)—also known as hantavirus cardiopulmonary syndrome (HCPS)— while others have not been associated with known human disease. HPS (HCPS) is a rare respiratory illness associated with the inhalation of aerosolized rodent excreta (urine and feces) contaminated by hantavirus particles. Human infections of hantaviruses have almost entirely been linked to human contact with rodent excrement, but recent human-to-human transmission has been reported with the Andes virus in South America.

* Hematospermia is the finding of blood in the semen and is relatively common. The bleeding is believed to come from either the prostate or congested seminal vesicals and is invariably self limiting and without consequence. The amount of blood in semen can vary from a small drop to enough to give semen the look of blood. The amount of blood in semen will depend on the cause of bleeding. In addition to having blood in semen, other symptoms are: pain when ejaculating, pain when urinating, tenderness or swelling in the scrotum, tenderness in the groin area, pain in the lower back, blood in the urine. Most cases of blood in the semen are not serious and can be attributed to six causes: inflammation/infection, obstruction, tumors, vascular abnormalities, systemic factors, or trauma/medical procedures. The most common cause is prostate biopsy.

* Hematuria is the medical term for red blood cells in the urine. Red blood cells in the urine can come from the kidney (where urine is made) or anywhere in the urinary tract. The urinary tract includes the ureters (the tubes that carry the urine from the kidneys to

the bladder), the bladder (where urine is stored), the prostate (in men), and the urethra (the tube through which urine exits the body). Although seeing blood in the urine can be frightening, most of the time hematuria is not life threatening. However, it is important to investigate the cause of hematuria because, occasionally, it is caused by a serious condition. There are two main types of hematuria: gross and microscopic. Gross hematuria – Gross hematuria means that you can see blood with the naked eye because the urine is pink, red, purplish-red, brownish-red, or tea-colored. Microscopic hematuria – Microscopic hematuria means that the urine is normal in color, but there are an increased number of red blood cells seen with a microscope. A number of conditions can cause hematuria. Bladder infection (also called acute cystitis), which typically causes burning or pain with urination. Kidney infection (also called pyelonephritis). Kidney stones, which usually present with one-sided back or flank pain that can be severe. Certain kidney diseases. Vigorous exercise or injury (for example, after falling off a bike and bruising a kidney). Enlargement of the prostate (called benign prostatic hyperplasia), which is a common problem in older men. Cancer of the bladder, prostate, or kidney, more often in patients over age 50 years. Sometimes, the urine appears to have blood in it because there are other red substances (pigments) in the urine. This can happen if you eat an excessive amount of beets (called beeturia), food dyes, or certain medications (such as phenazopyridine/Pyridium).

* Hemoptysis is the act of coughing up blood or blood-stained mucus from the bronchi, larynx, trachea, or lungs. This can occur with lung cancer, infections such as tuberculosis, bronchitis, or pneumonia, and certain cardiovascular conditions. Hemoptysis is considered massive if there is more than 300 mL (11 imp fl oz; 10 US fl oz) of blood lost in 24 hours. In such cases, the primary danger comes from choking, rather than blood loss. There are many conditions involving hemoptysis bronchitis and pneumonia most commonly, but also lung cancers (in smokers, hemoptysis is often persistent), aspergilloma, tuberculosis, bronchiectasis, coccidioidomycosis, pulmonary embolism, pneumonic plague, and cystic fibrosis. The origin of blood can be identified by observing its color. Bright-red, foamy blood comes from the respiratory tract, whereas dark-red, coffee-colored blood comes from the gastrointestinal tract. Sometimes hemoptysis may be rust-colored. The most common cause of minor hemoptysis is bronchitis.

* Hemorrhage cranial epidural is a type of intracranial hematoma (blood clot or clots) that often results from a skull fracture. An epidural hematoma occurs when a blood clot forms underneath the skull, but on top of the dura, the tough covering that surrounds the brain. They usually come from a tear in an artery that runs just under the skull called the middle meningeal artery. They are usually associated with a skull fracture. The person may have varying degrees of symptoms associated with the severity of the head injury. The following are the most common symptoms of a head injury. However, each individual may experience symptoms differently. Confusion, loss of consciousness, blurred vision, severe headache, vomiting, loss of short-term memory, such as difficulty remembering the events that lead right up to and through the traumatic event, slurred speech, difficult walking, dizziness, weakness in one side or area of the body, sweating, pale skin color, seizures, behavior changes including irritability, blood or clear fluid

draining from the ears or nose, one pupil (dark area in the center of the eye) looks larger than the other eye, deep cut or laceration in the scalp, open wound in the head, foreign object penetrating the head. Head injury may cause the brain to swell. Since the brain is covered by the skull, there is only a small amount of room for it to swell. This causes pressure inside the skull to increase, which can lead to brain damage.

* Ileocolitis, also Crohn's disease is a disease that causes inflammation, or swelling, and irritation of any part of the digestive tract—also called the gastrointestinal (GI) tract. The part most commonly affected is the end part of the small intestine, called the ileum. The GI tract is a series of hollow organs joined in a long, twisting tube from the mouth to the anus. The movement of muscles in the GI tract, along with the release of hormones and enzymes, allows for the digestion of food. In Crohn's disease, inflammation extends deep into the lining of the affected part of the GI tract. Swelling can cause pain and can make the intestine—also called the bowel—empty frequently, resulting in diarrhea. Chronic—or long-lasting—inflammation may produce scar tissue that builds up inside the intestine to create a stricture. A stricture is a narrowed passageway that can slow the movement of food through the intestine, causing pain or cramps.

* Impetigo, also known as school sores, is a bacterial infection that involves the superficial skin. The most common presentation is yellowish crust on the face, arms, or legs. Less commonly there may be large blisters which affect the groin or armpits. The lesions may be painful or itchy. Fever is uncommon. It is typically due to either Staphylococcus aureus or Streptococcus pyogenes. Risk factors include attending daycare, crowding, poor nutrition, diabetes, contact sports, and breaks in the skin such as from mosquito bites, eczema, or scabies. With contact it can spread around or between people.Other factors can increase the risk of contracting impetigo such as diabetes, dermatitis, immunodeficiency disorders, and other irritable skin disorders. Impetigo occurs more frequently among people who live in warm climates. Impetigo affected about 140 million people (2% of the population) in 2010. Globally, impetigo affects more than 162 million children in low to middle income countries. The rates are highest in countries with low available resources and is especially in the region of Oceania. The tropical climate and high population in lower socioeconomic regions contribute to these high rates. In children in the United Kingdom under the age of 4 are 2.8% more likely to contract impetigo and rates decreases to 1.6% for children up to 15-years-old. As age increases, the rates of impetigo declines but all ages are still susceptible. Without treatment people typically get better within three weeks. Complications may include cellulitis or poststreptococcal glomerulonephritis. Impetigo is usually diagnosed based on its appearance. It generally appears as honey-colored scabs formed from dried serum, and is often found on the arms, legs, or face.

* Intestinal neuronal dysplasia (or neuronal intestinal dysplasia or NID) is an inherited disease of the intestine that affects one in 3000 children and adults. The intestine uses peristalsis to push its contents toward the anus; IND sufferers have a problem with the motor neurons that lead to the intestine, inhibiting this process and thus preventing digestion. It can often be confused for Hirschsprung's disease, as both have similar symptoms. It can be grouped into NID A and NID B, with the "A" form affecting the

sympathetic innervation, and the "B" version affecting the parasympathetic innervation.

* Ischemic Heart Disease, also known as Coronary Artery Disease, is a condition that affects the supply of blood to the heart. The blood vessels are narrowed or blocked due to the deposition of cholesterol on their walls. This reduces the supply of oxygen and nutrients to the heart muscles, which is essential for proper functioning of the heart. This may eventually result in a portion of the heart being suddenly deprived of its blood supply leading to the death of that area of heart tissue, resulting in a heart attack. As the heart is the pump that supplies oxygenated blood to the various organs, any defect in the heart immediately affects the supply of oxygen to the vital organs like the brain, kidneys, liver, etc. This leads to the death of tissue within these organs and their eventual failure. Ischemic Heart Disease is the most common cause of death in many countries around the world. The major risk factors are smoking, diabetes mellitus and cholesterol levels. Those with Hypercholesterolemia have a much higher tendency to develop the disease. Hypertension is also a risk factor in the development of Ischemic Heart Disease. Genetic and hereditary factors may also be responsible for the disease. Stress is also thought to be a risk factor. Some symptoms are: Angina pectoris, Acute chest pain: which can be associated with acute coronary syndrome, unstable angina or myocardial infarction, Heart failure -difficulty in breathing or swelling of the extremities due to weakness of the heart muscle.

* A lipoma is a very slow growing, fatty lump normally found situated between the skin and the muscle layer underneath the skin. Most often a lipoma is very simple to identify since it will easily move if there is any pressure on it. When touched it is very doughy and normally not tender. There may be more than one. They can develop at any age but most often occur during mid life. A lipoma is not a cancer and is typically not dangerous. Lipomas are usually found on back, neck, arms as well as shoulder, but they can develop on any other part of the body. Additionally, men are most likely to develop multiple lipomas than woman, although either sex is more equally likely to have single developments. Often, the most troublesome symptom is the location or the increase in size which makes the lipoma obviously noticeable by others.

* Livedo reticularis is a common skin finding consisting of a mottled reticulated vascular pattern that appears as a lace-like purplish discoloration of the skin. The discoloration is caused by swelling of the venules owing to obstruction of capillaries by small blood clots. The blood clots in the small blood vessels can be a secondary effect of a condition that increases a person's risk of forming blood clots, including a wide array of pathological and nonpathological conditions . Examples include hyperlipidemia, microvascular hematological or anemia states, nutritional deficiencies, hyper- and autoimmune diseases, and drugs/toxins. The condition may be normal or related to more severe underlying pathology. Its differential diagnosis is broadly divided into possible blood diseases, autoimmune (rheumatologic) diseases, cardiovascular diseases, cancers, and endocrine disorders. It may be aggravated by exposure to cold, and occurs most often in the lower extremities.

* Lung abscess is a type of liquefactive necrosis of the lung tissue and formation of

cavities (more than 2 cm) containing necrotic debris or fluid caused by microbial infection. This pus-filled cavity is often caused by aspiration, which may occur during anesthesia, sedation, or unconsciousness from injury. Alcoholism is the most common condition predisposing to lung abscesses. Onset of symptoms is often gradual, but in necrotizing staphylococcal or gram-negative bacillary pneumonias patients can be acutely ill. Cough, fever with shivering, and night sweats are often present. Cough can be productive of foul smelling purulent mucus (≈70%) or less frequently with blood in one third of cases). Affected individuals may also complain of chest pain, shortness of breath, lethargy and other features of chronic illness. Those with a lung abscess are generally cachectic at presentation. Finger clubbing is present in one third of patients. Dental decay is common especially in alcoholics and children. On examination of the chest there will be features of consolidation such as localized dullness on percussion and bronchial breath sounds. Conditions contributing to lung abscess: Aspiration of oropharyngeal or gastric secretion. Septic emboli. Necrotizing pneumonia. Vasculitis: Granulomatosis with polyangiitis. Necrotizing tumors: 8% to 18% are due to neoplasms across all age groups, higher in older people; primary squamous carcinoma of the lung is the most common. Anaerobic bacteria: Actinomyces, Peptostreptococcus, Bacteroides, Fusobacterium species. Microaerophilic streptococcus : Streptococcus milleri. Aerobic bacteria: Staphylococcus, Klebsiella, Haemophilus, Pseudomonas, Nocardia, Escherichia coli, Streptococcus, Mycobacteria. Fungi: Candida, Aspergillus. Parasites: Entamoeba histolytica.

* Lung collapse or atelectasis is the collapse or closure of a lung resulting in reduced or absent gas exchange. It may affect part or all of a lung. It is usually not bilateral. It is a condition where the alveoli are deflated down to little or no volume, as distinct from pulmonary consolidation, in which they are filled with liquid. It is often called a collapsed lung, although that term may also refer to pneumothorax. Although frequently described as a collapse of lung tissue, atelectasis is not synonymous with a pneumothorax, which is a more specific condition that features atelectasis. Acute atelectasis may occur as a post-operative complication or as a result of surfactant deficiency. In premature neonates, this leads to infant respiratory distress syndrome. May have no signs and symptoms or they may include: cough, but not prominent; chest pain (not common); breathing difficulty (fast and shallow); low oxygen saturation; pleural effusion (transudate type); cyanosis (late sign); increased heart rate. The most common cause is post-surgical atelectasis, characterized by splinting, i.e. restricted breathing after abdominal surgery. Other most common cause is pulmonary Koch. Smokers and the elderly are at an increased risk. Outside of this context, atelectasis implies some blockage of a bronchiole or bronchus, which can be within the airway (foreign body, mucus plug), from the wall (tumor, usually squamous cell carcinoma) or compressing from the outside (tumor, lymph node, tubercle). Another cause is poor surfactant spreading during inspiration, causing the surface tension to be at its highest which tends to collapse smaller alveoli. Atelectasis may also occur during suction, as along with sputum, air is withdrawn from the lungs.

* Lymphangiomas are malformations of the lymphatic system characterized by lesions that are thin-walled cysts; these cysts can be macroscopic, as in a cystic hygroma, or

microscopic. The lymphatic system is the network of vessels responsible for returning to the venous system excess fluid from tissues as well as the lymph nodes that filter this fluid for signs of pathogens. These malformations can occur at any age and may involve any part of the body, but 90% occur in children less than 2 years of age and involve the head and neck. These malformations are either congenital or acquired. Most lymphangiomas are benign lesions that result only in a soft, slow-growing, "doughy" mass. Since they have no chance of becoming malignant, lymphangiomas are usually treated for cosmetic reasons only. Rarely, impingement upon critical organs may result in complications, such as respiratory distress when a lymphangioma compresses the airway. There are three distinct types of lymphangioma, each with their own symptoms. They are distinguished by the depth and the size of abnormal lymph vessels, but all involve a malformation of the lymphic system. Lymphangioma circumscriptum can be found on the skin's surface, and the other two types of lymphangiomas occur deeper under the skin.

* Microphthalmos or Microphtalmia is an eye abnormality that arises before birth. In this condition, one or both eyeballs are abnormally small. In some affected individuals, the eyeball may appear to be completely missing; however, even in these cases some remaining eye tissue is generally present. Such severe microphthalmia should be distinguished from another condition called anophthalmia, in which no eyeball forms at all. However, the terms anophthalmia and severe microphthalmia are often used interchangeably. Microphthalmia may or may not result in significant vision loss. People with microphthalmia may also have a condition called coloboma. Colobomas are missing pieces of tissue in structures that form the eye. They may appear as notches or gaps in the colored part of the eye called the iris; the retina, which is the specialized light-sensitive tissue that lines the back of the eye; the blood vessel layer under the retina called the choroid; or in the optic nerves, which carry information from the eyes to the brain. Colobomas may be present in one or both eyes and, depending on their size and location, can affect a person's vision. People with microphthalmia may also have other eye abnormalities, including clouding of the lens of the eye (cataract) and a narrowed opening of the eye (narrowed palpebral fissure). Additionally, affected individuals may have an abnormality called microcornea, in which the clear front covering of the eye (cornea) is small and abnormally curved. Between one-third and one-half of affected individuals have microphthalmia as part of a syndrome that affects other organs and tissues in the body. These forms of the condition are described as syndromic. When microphthalmia occurs by itself, it is described as nonsyndromic or isolated.

* Mitral click-murmur, also kmown as mitral valve prolapse is a condition in which the two valve flaps of the mitral valve do not close smoothly or evenly, but instead bulge (prolapse) upward into the left atrium. When the heart pumps (contracts) part of one or both flaps collapse backward into the left atrium. In some cases, the prolapsed valve lets a small amount of blood leak backward through the valve, which may cause a heart murmur. In most cases, it’s harmless. Most people who have the condition are unaware of it and their health is not affected. In a small number of cases, the prolapse can cause blood to leak backwards. This is called mitral regurgitation.. The most common cause of

MVP is abnormally stretchy valve leaflets (called myxomatous valve disease). Mitral valve prolapse occurs in around 2 percent of the population. A person can be born with the genetic risk of developing MVP or it can be caused by other health problems, such as some connective tissue diseases. Many people with mitral valve prolapse DO NOT have symptoms. The group of symptoms found in people with mitral valve prolapse is called "mitral valve prolapse syndrome," and includes: Chest pain (not caused by coronary artery disease or a heart attack), Dizziness, Fatigue, Panic attacks, Sensation of feeling the heart beat (palpitations), Shortness of breath with activity or when lying flat (orthopnea). When mitral regurgitation occurs, symptoms may be related to this leaking.

* Multicystic Dysplastic Kidney is a condition in which the internal structures of one or both of a fetus' kidneys do not develop normally while in the womb. During normal development, two thin tubes of muscle called ureters grow into the kidneys and branch out to form a network of tiny structures called tubules. The tubules collect urine as the fetus grows in the womb. In kidney dysplasia, the tubules fail to branch out completely. Urine that would normally flow through the tubules has nowhere to go. Urine collects inside the affected kidney and forms fluid-filled sacs called cysts. The cysts replace normal kidney tissue and prevent the kidney from functioning. Kidney dysplasia can affect one kidney or both kidneys. Babies with severe kidney dysplasia affecting both kidneys generally do not survive birth. Children with dysplasia in only one kidney have normal kidney function if the other kidney is unaffected. Genetic factors can cause kidney dysplasia. Genetic syndromes that affect multiple body systems can also cause kidney dysplasia. A baby may also develop kidney dysplasia if his or her mother takes certain prescription medications during pregnancy, such as some used to treat seizures and high blood pressure. A mother's use of illegal drugs, such as cocaine, during pregnancy may also cause kidney dysplasia in her unborn child. Kidney dysplasia is a common condition. Scientists estimate that kidney dysplasia affects about one in 4,000 babies. About half of the babies diagnosed with this condition have other urinary tract defects. Many babies with kidney dysplasia in only one kidney have no signs of the condition. In some cases, the affected kidney may be enlarged at birth and may cause pain. Complications of kidney dysplasia can include hydronephrosis of the working kidney. A baby with kidney dysplasia in only one kidney might have other urinary tract defects. Urinary tract infection. High blood pressure. A slightly increased chance of developing kidney cancer.

* Multiple myeloma is a cancer of the bone marrow plasma cells, white blood cells that make antibodies. A cancerous or malignant plasma cell is called a myeloma cell. Myeloma is called "multiple" because there are frequently multiple patches or areas in bone where it grows. It can appear as both a tumor and/or an area of bone loss, and it affects the places where bone marrow is active in an adult: the hollow area within the bones of the spine, skull, pelvis, rib cage, and the areas around the shoulders and hips. The major features of myeloma result from the abnormal accumulation of myeloma cells within the bone marrow, causing: Disruption of normal bone marrow function reflected by anemia and/or low white counts or platelet counts; Destruction and invasion of bone and surrounding areas of bone marrow involvement; Production and release of monoclonal protein from the myeloma cells into the blood stream and/or into the urine;

Reduction of normal immune function, reflected by reduced levels of normal immunoglobulins and increased susceptibility to infection. Infection is also more likely if the white blood cell count is low. Symptoms: Persistent or worsening tiredness due to anemia or reduced kidney function; Sudden pain due to a broken bone in the spine, ribs, or elsewhere; Recurrent unexplained infections, such as pneumonia, sinus, or urinary infection. Signs: Pain with movement and/or at night/rest; Pain tenderness/swelling of bone areas; Swelling, shortness of breath or evidence of heart or kidney failure [late stages of the disease]. Multiple myeloma is the second most common blood cancer in the world.

* Myelodysplastic syndromes (MDS) are a group of cancers in which immature blood cells in the bone marrow do not mature and become healthy blood cells. Early on there are typically no symptoms. Later symptoms may include feeling tired, shortness of breath, easy bleeding, or frequent infections. Some types may develop into acute myeloid leukemia. Risk factors include previous chemotherapy or radiation therapy, exposure to certain chemicals such as tobacco smoke, pesticides, and benzene, and exposure to heavy metals such as mercury or lead. Problems with blood cell formation result in some combination of low red blood cells, low platelets, and low white blood cells. Some types have an increase in immature blood cells, called blasts, in the bone marrow or blood. The types of MDS are based on specific changes in the blood cells and bone marrow. About 7 per 100,000 people are affected with about 4 per 100,000 people newly acquiring the condition each year. The typical age of onset is 70 years old. The outlook depends on the type of cells affected, the amount of blasts in the bone marrow or blood, and the changes present in the chromosomes of the affected cells. The typical survival rate following diagnosis is 2.5 years. Signs and symptoms are nonspecific and generally related to the blood cytopenias: Anemia (low RBC count or reduced hemoglobin) —chronic tiredness, shortness of breath, chilled sensation, sometimes chest pain; Neutropenia (low neutrophil count) — increased susceptibility to infection; Thrombocytopenia (low platelet count) — increased susceptibility to bleeding and ecchymosis (bruising), as well as subcutaneous hemorrhaging resulting in purpura or petechiae. Many individuals are asymptomatic, and blood cytopenia or other problems are identified as a part of a routine blood count: neutropenia, anemia and thrombocytopenia (low cell counts of white and red blood cells, and platelets, respectively); splenomegaly or rarely hepatomegaly; abnormal granules in cells, abnormal nuclear shape and size; and/or chromosomal abnormalities, including chromosomal translocations and abnormal chromosome number. Although there is some risk for developing acute myelogenous leukemia, about 50% of deaths occur as a result of bleeding or infection. However, leukemia that occurs as a result of myelodysplasia is notoriously resistant to treatment. Anemia dominates the early course. Most symptomatic patients complain of the gradual onset of fatigue and weakness, dyspnea, and pallor, but at least half the patients are asymptomatic and their MDS is discovered only incidentally on routine blood counts. Previous chemotherapy or radiation exposure is an important fact in the person's medical history. Fever and weight loss should point to a myeloproliferative rather than myelodysplastic process.

* Myocarditis is a disease marked by the inflammation of the heart muscle. This heart

muscle is known as the myocardium, which is the muscular layer of the heart wall. This muscle is responsible for contracting and releasing to pump blood in and out of the heart and to the rest of the body. When this muscle becomes inflamed, its ability to pump blood becomes less effective. This causes problems like an irregular heartbeat, and trouble breathing. In extreme cases, it can cause blood clots, heart attack, stroke, or damage to the heart. Normally, inflammation is a bodily response to any sort of wound or infection. The immune system in your body is producing special cells to rush to the site of the wound and implement repairs. Sometimes this can help speed along the healing process, but other times, inflammation becomes myocarditis. Myocarditis is usually caused by viral (most common), bacterial, or fungal infections that make their way to the heart. As the infection tries to take hold, the immune system fights back, releasing chemicals to try to get rid of the disease. This results in inflammation. However, it can backfire and weaken the heart itself. Some autoimmune diseases, like lupus, can cause the immune system to turn against the heart, resulting in inflammation and damage. The dangerous thing about myocarditis is that it can affect anyone, occur at any age, and often proceeds without displaying any symptoms. If symptoms do develop, they often resemble those symptoms one might experience with the flu, such as: fatigue, shortness of breath, fever, joint pain or swelling, achy feeling in the chest. Many times, myocarditis may subside on its own without treatment, much like a cut on your finger would eventually heal. Even more serious cases that go on for a long time may never create symptoms of heart failure, but secretly may cause damage to the heart muscle. In other instances, the heart will start to reveal its struggles, with symptoms like shortness of breath, heart palpitations or rapid heartbeat, and congestive heart failure.

* Non-Hodgkin lymphoma (NHL) is a group of blood cancers that includes all types of lymphoma except Hodgkin's lymphomas. Symptoms include enlarged lymph nodes, fever, night sweats, weight loss, and feeling tired. Other symptoms may include bone pain, chest pain, or itchiness. Some forms are slow growing while others are fast growing. Lymphomas are types of cancer that develops from lymphocytes, a type of white blood cell. Risk factors include poor immune function, autoimmune diseases, Helicobacter pylori infection, hepatitis C, obesity, and Epstein-Barr virus infection. The World Health Organization (WHO) classifies lymphomas into five major groups, including one for Hodgkin's lymphoma. Within the four groups for NHL there are over 60 specific types of lymphoma. In 2013 about 2.96 million people had non-Hodgkin lymphoma and 226,000 died. In the United States 2.1% of people are affected at some point in their life. The most common age of diagnosis is between 65 to 75 years old. The percentage of people who survive five years in the United States is 71%. Symptoms include enlarged lymph nodes, fever, night sweats, weight loss, and feeling tired. Other symptoms may include bone pain, chest pain, or itchiness. Some forms are slow growing while others are fast growing. Possible causes and associations with at least some forms of NHL include the following: Infectious agents: Epstein-Barr virus: associated with Burkitt's lymphoma, Hodgkin's lymphoma, follicular dendritic cell sarcoma, extranodal NK-T-cell lymphoma. Human T-cell leukemia virus: associated with adult T-cell lymphoma. Helicobacter pylori: associated with gastric lymphoma. HHV-8: associated with primary effusion lymphoma, multicentric Castleman disease. Hepatitis C

virus: associated with splenic marginal zone lymphoma, lymphoplasmacytic lymphoma and diffuse large B-cell lymphoma. HIV infection. Some chemicals, like polychlorinated biphenyls (PCBs), diphenylhydantoin, dioxin, and phenoxy herbicides. Medical treatments, like radiation therapy and chemotherapy. Genetic diseases, like Klinefelter's syndrome, Chédiak-Higashi syndrome, ataxia telangiectasia syndrome. Autoimmune diseases, like Sjögren’s syndrome, celiac disease, rheumatoid arthritis, and systemic lupus erythematosus. NHL is the sixth most common cancer in the UK (around 12,800 people were diagnosed with the disease in 2011), and it is the eleventh most common cause of cancer death (around 4,700 people died in 2012).

* Parapsoriasis refers to one of a group of skin disorders that are characterized primarily by their resemblance to psoriasis (red, scaly lesions), rather than by their underlying etiology. Neoplasms can develop from parapsoriasis. For example, it can develop into cutaneous T-cell lymphoma. The parapsoriasis groups, described and debated for nearly a century, has spawned a confusing nomenclature. There are some authors who prefer to limit the term "parapsoriasis" to large- and small-plaque variants only. However, the following classification scheme is now generally accepted: Large-plaque parapsoriasis. Small-plaque parapsoriasis. Pityriasis lichenoides: Pityriasis lichenoides chronica, Pityriasis lichenoides et varioliformis acuta. Lymphomatoid papulosis.

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* Pericardial effusion ("fluid around the heart") is an abnormal accumulation of fluid in the pericardial cavity. Because of the limited amount of space in the pericardial cavity, fluid accumulation leads to an increased intrapericardial pressure which can negatively affect heart function. A pericardial effusion with enough pressure to adversely affect heart function is called cardiac tamponade. Pericardial effusion usually results from a disturbed equilibrium between the production and re-absorption of pericardial fluid, or from a structural abnormality that allows fluid to enter the pericardial cavity. Normal levels of pericardial fluid are from 15 to 50 mL. Chest pain or pressure are common symptoms. A small effusion may be asymptomatic. Larger effusions may cause cardiac tamponade, a life-threatening complication; signs of impending tamponade include dyspnea, low blood pressure, and distant heart sounds. The so-called "water-bottle heart" is a radiographic sign of pericardial effusion, in which the cardiopericardial silhouette is enlarged and assumes the shape of a flask or water bottle. It can be associated with dullness to percussion over the left subscapular area due to compression of the left lung base. This phenomenon is known as Ewart's sign. Possible causes may include: Pericarditis. Long term usage of cabergoline ingredient (dopamine agonists). Viral infection (coxsackie virus). Infection including tuberculosis. Drug Eluting Stents. Inflammatory disorders, such as lupus, rheumatoid arthritis and post myocardial infarction pericarditis (Dressler's syndrome). Cancer that has spread to the pericardium. Trichinosis. Kidney failure with excessive blood levels of urea nitrogen. Minoxidil. Hypothyroidism. Heart surgery (postpericardotomy syndrome). Clogged Chest tube after heart surgery, leading to retained blood complications.

* Pericardial tamponade, also known as Cardiac tamponade, is when fluid in the

pericardium (the sac around the heart) builds up and results in compression of the heart. Onset may be rapid or more gradual. Symptoms typically include those of cardiogenic shock including shortness of breath, weakness, lightheadedness, and cough. Other symptoms may relate to the underlying cause. Common causes include cancer, kidney failure, chest trauma, and pericarditis. Other causes include connective tissue diseases, hypothyroidism, aortic rupture, and following cardiac surgery. In Africa, tuberculosis is a relatively common cause. Onset may be rapid or more gradual. Symptoms typically include those of cardiogenic shock including shortness of breath, weakness, lightheadedness, and cough. Other symptoms may relate to the underlying cause. Cardiac tamponade is caused by a large or uncontrolled pericardial effusion, i.e. the buildup of fluid inside the pericardium. This commonly occurs as a result of chest trauma (both blunt and penetrating), but can also be caused by myocardial rupture, cancer, uremia, pericarditis, or cardiac surgery, and rarely occurs during retrograde aortic dissection, or while the person is taking anticoagulant therapy. The effusion can occur rapidly (as in the case of trauma or myocardial rupture), or over a more gradual period of time (as in cancer). The fluid involved is often blood, but pus is also found in some circumstances. Causes of increased pericardial effusion include hypothyroidism, physical trauma (either penetrating trauma involving the pericardium or blunt chest trauma), pericarditis (inflammation of the pericardium), iatrogenic trauma (during an invasive procedure), and myocardial rupture. The outer layer of the heart is made of fibrous tissue which does not easily stretch, so once fluid begins to enter the pericardial space, pressure starts to increase. If fluid continues to accumulate, each successive diastolic period leads to less blood entering the ventricles. Eventually, increasing pressure on the heart forces the septum to bend in towards the left ventricle, leading to a decrease in stroke volume. This causes the development of obstructive shock, which if left untreated may lead to cardiac arrest (often presenting as pulseless electrical activity).

* A pharyngeal diverticulum, also pharyngeal pouch, also hypopharyngeal diverticulum, and Zenker's diverticulum, is a diverticulum of the mucosa of the pharynx, just above the cricopharyngeal muscle (i.e. above the upper sphincter of the esophagus). It is a pseudo diverticulum (not involving all layers of the esophageal wall). In simple words, when there is excessive pressure within the lower pharynx, the weakest portion of the pharyngeal wall balloons out, forming a diverticulum which may reach several centimetres in diameter. While it may be asymptomatic, Zenker diverticulum can present with the following symptoms: Dysphagia (difficulty swallowing), and sense of a lump in the throat. Food might get trapped in the outpouching, leading to: Regurgitation, reappearance of ingested food in the mouth. Cough, due to food regurgitated into the airway. Halitosis, smelly breath, as stagnant food is digested by microorganisms. Infection. It rarely, if ever, causes any pain. Zenker's diverticulum mainly affects older adults. It has an incidence of 2 per 100,000 per year in the UK, but there is significant geographical variation around the world.

* Phlebitis or venitis is the inflammation of a vein, usually in the legs. It most commonly occurs in superficial veins. Phlebitis often occurs in conjunction with thrombosis and is then called thrombophlebitis or superficial thrombophlebitis. Unlike deep vein

thrombosis, the probability that superficial thrombophlebitis will cause a clot to break up and be transported in pieces to the lung is very low. Signs and symptoms include: Localized redness and swelling. Pain or burning along the length of the vein. Vein being hard and cord-like. Phlebitis is typically caused by local trauma to a vein, usually from the insertion of an intravenous catheter. However, it can also occur due to a complication of connective tissue disorders such as lupus, or of pancreatic, breast, or ovarian cancers. Phlebitis can also result from certain medications and drugs that irritate the veins, such as desomorphine. Superficial phlebitis often presents as an early sign in thromboangiitis obliterans (Buerger's disease), a vasculitis that affects small and medium-sized arteries and veins in distal extremities often associated with cigarette smoking.

* A pleural effusion is a collection of fluid next to the lung. There are various causes. The effusion may cause you to become breathless. A pleural effusion means that there is a build-up of fluid between a lung and the chest wall. The pleura is a thin membrane that lines the inside of the chest wall and covers the lungs. There is normally a tiny amount of fluid between the two layers of pleura. This acts like lubricating oil between the lungs and the chest wall as they move when you breathe. A pleural effusion develops when this fluid builds up and separates the lung from the chest wall. Common causes of a pleural effusion: Lung infection (pneumonia), tuberculosis, and cancers may cause inflammation of the lung and pleura. This may cause fluid to build up into a pleural effusion. Some arthritic conditions may cause inflammation of the pleura in addition to joint inflammation. For example, pleural effusion is an uncommon complication of rheumatoid arthritis and systemic lupus erythematosis (SLE). Heart failure causes 'back pressure' in the veins (blood vessels) that take blood back to the heart. Some fluid may seep out of the blood vessels. Swelling of the legs with fluid is typical with heart failure, but a pleural effusion may also develop. A low level of protein in the blood also tends to allow fluid to seep out of the blood vessels. For example, cirrhosis of the liver and some kidney diseases may cause a low level of blood protein which allows a pleural effusion to develop. Chest pain is a common symptom though a pleural effusion is often painless. The amount of fluid varies. As the effusion becomes larger, it presses on the lung, which cannot expand fully when you breathe. You may then become breathless. You may also have symptoms of the condition that is causing the effusion. There is a large range of other symptoms that may occur, depending on the underlying cause. One example is you may have a cough and a high temperature (fever) if the cause is lung infection (pneumonia).

* A pulmonary embolism is a blood clot that occurs in the lungs. It can damage part of the lung due to restricted blood flow, decrease oxygen levels in the blood, and affect other organs as well. Large or multiple blood clots can be fatal. The blockage can be life-threatening. Blood clots can form for a variety of reasons. Pulmonary embolisms are most often caused by deep vein thrombosis, a condition in which blood clots form in veins deep in the body. The blood clots that most often cause pulmonary embolisms begin in the legs or pelvis. Symptoms of a pulmonary embolism depend on the size of the clot and where it lodges in the lung. The most common symptom of a pulmonary embolism is shortness of breath. This may be gradual or sudden. Symptoms of a PE

may include shortness of breath, chest pain particularly upon breathing in, and coughing up blood. Symptoms of a blood clot in the leg may also be present such as a red, warm, swollen, and painful leg. Signs of a PE include low blood oxygen levels, rapid breathing, rapid heart rate, and sometimes a mild fever. Severe cases can lead to passing out, abnormally low blood pressure, and sudden death. Occurrence rates are similar in males and females. They become more common as people get older.

* Salpingitis is an infection and inflammation in the fallopian tubes. It is often used synonymously with pelvic inflammatory disease (PID), although PID lacks an accurate definition and can refer to several diseases of the female upper genital tract, such as endometritis, oophoritis, myometritis, parametritis and infection in the pelvic peritoneum. In contrast, salpingitis only refers to infection and inflammation in the fallopian tubes. The infection usually has its origin in the vagina, and ascends to the fallopian tube from there. Because the infection can spread via the lymph vessels, infection in one fallopian tube usually leads to infection of the other. The symptoms usually appear after a menstrual period. The most common are: Abnormal smell and colour of vaginal discharge. Pain during ovulation, Pain during sexual intercourse. Pain coming and going during periods. Abdominal pain. Lower back pain. Fever. Nausea. Vomiting. Bloating.

* Spondylolisthesis is is the forward displacement of a vertebral bone in relation to the natural curve of the spine, most commonly occurring after a fracture, and most often the fifth lumbar vertebra. Backward displacement is referred to as retrolisthesis. When occurring in conjunction with scoliosis, the shortened term "olisthesis," may sometimes be used instead. Symptoms of spondylolisthesis include: A general stiffening of the back and a tightening of the hamstrings, with a resulting change in both posture and gait. A leaning-forward or semi-kyphotic posture may be seen, due to compensatory changes. A "waddle" may be seen in more advanced causes, due to compensatory pelvic rotation due to decreased lumbar spine rotation. A result of the change in gait is often a noticeable atrophy in the gluteal muscles due to lack of use. Generalized lower-back pain may also be seen, with intermittent shooting pain from the buttocks to the posterior thigh, and/or lower leg via the sciatic nerve. Other symptoms may include tingling and numbness. Coughing and sneezing can intensify the pain. An individual may also note a "slipping sensation" when moving into an upright position. Sitting and trying to stand up may be painful and difficult.

* Testicular feminization, also Androgen insensitivity syndrome is a condition that affects sexual development before birth and during puberty. People with this condition are genetically male, with one X chromosome and one Y chromosome in each cell. Because their bodies are unable to respond to certain male sex hormones (called androgens), they may have mostly female external sex characteristics or signs of both male and female sexual development. Complete androgen insensitivity syndrome occurs when the body cannot use androgens at all. People with this form of the condition have the external sex characteristics of females, but do not have a uterus and therefore do not menstruate and are unable to conceive a child (infertile). They are typically raised as females and have a female gender identity. Affected individuals have male internal sex organs (testes) that are undescended, which means they are

abnormally located in the pelvis or abdomen. Undescended testes have a small chance of becoming cancerous later in life if they are not surgically removed. People with complete androgen insensitivity syndrome also have sparse or absent hair in the pubic area and under the arms. The partial and mild forms of androgen insensitivity syndrome result when the body's tissues are partially sensitive to the effects of androgens. People with partial androgen insensitivity (also called Reifenstein syndrome) can have genitalia that look typically female, genitalia that have both male and female characteristics, or genitalia that look typically male. They may be raised as males or as females and may have a male or a female gender identity. People with mild androgen insensitivity are born with male sex characteristics, but they are often infertile and tend to experience breast enlargement at puberty.

1.1.23 RTS-15

https://archive.org/details/Resonant_Therapy_Sessions_15

Adrenal Hyperplasia Congenital, Anophthalmos, Arbovirus Infections, Arnold-Chiari Malformation, Bare Lymphocyte Syndrome, Basal Cell Nevus Syndrome, Branched-Chain Ketoaciduria, Caliciviridae Infections, Cancer-Extrahepatic Bile Duct, Cancer-Nervous System Neoplasms, Cancer-Pancreatic Exocrine Islet Cell, Cancer-Uterine Sarcoma, Cerebral Gigantism, Chancroid, Cholangitis, Chondroectodermal Dysplasia, Colitis Ulcerative, Coloboma, Cystinuria, Dandy-Walker Syndrome, Enchondromatosis, Endocarditis Bacterial, Erythremia, Escherichia Coli Infections, Esophageal Atresia, Fasciculation, Fibromuscular Dysplasia, Fucosidosis, Gastroschisis, Glutaric Acidemia, Hamartoma, Helminthiasis, Histidinemia, Hordeolum, Hyperhidrosis, Hyperimmunoglobulin E-Recurrent Infection Syndrome, Hypothyroidism, Idiopathic Scrotal Calcinosis, Jaundice, Keratoconus, Lateral Bulbar Syndrome, Lichen Sclerosus et Atrophicus, Lymphoproliferative Disorders, Medullary Sponge Kidney, Nephritis Familial, Neuroendocrine Tumors, Pericardial Cyst, Phenylketonurias, Pneumothorax, Poliodystrophia Cerebri, Polyomavirus Infections, Progressive Supranuclear Ophthamoplegia, Prosthesis Implantation, Pulmonary Alveolar Proteinosis, Pulmonary Hypertension, Pulmonary Sarcoidosis, Renal Osteodystrohy, Tumor Virus Infections, Urethritis, Wiskott-Aldrich Syndrome

* Adrenal Hyperplasia Congenital refers to a group of genetic conditions that affect the adrenal glands. These glands sit on top of the kidneys and are responsible for releasing various types of hormones that the body needs to function. Affected people lack an enzyme the adrenal glands need to make one or more of these hormones and often overproduce androgens (male hormones such as testosterone). The signs and symptoms present in each person depend on many factors including the type of CAH, the age of diagnosis, and the sex of the affected person. Females with a severe form of the condition may have ambiguous genitalia at birth and if not properly diagnosed,

develop dehydration, poor feeding, diarrhea, vomiting and other health problems soon after. Males typically appear unaffected at birth even when they have a severe form of CAH and without proper diagnosis, will develop associated health problems within 2-3 weeks after birth. Both genders can experience other symptoms such as early onset of puberty, fast body growth, and premature completion of growth leading to short stature, if they are not treated in early life. People affected by milder forms may not have any signs and symptoms of CAH during childhood. In these cases, a diagnosis may not be made until adolescence or adulthood when the affected person experiences early signs of puberty or fertility problems. Females with this type may have excessive facial or body hair; irregular menstrual periods; and/or acne. There are two main types of CAH: classic CAH, the more severe form, and a milder form called nonclassic CAH.

* Anophthalmos or anophthalmia, is the medical term for the absence of one or both eyes. Both the globe (human eye) and the ocular tissue are missing from the orbit. The absence of the eye will cause a small bony orbit, a constricted mucosal socket, short eyelids, reduced palpebral fissure and malar prominence. Anophthalmia is an extremely rare disease and is mostly rooted in genetic abnormalities. It can also be associated with other syndromes. Anophthalmia has been reported to be present in 3 out of every 100,000 births. Many instances of anophthalmia also occur with microphthalmia. A recent study in the UK indicated that anophthalmia and microphthalmia had a combined average of 1 in every 10,000 births.

* Arbovirus is a term used to refer to a group of viruses that are transmitted by arthropod vectors. Symptoms of arbovirus infection generally occur 3–15 days after exposure to the virus and last 3 or 4 days. The most common clinical features of infection are fever, headache, and malaise, but encephalitis and hemorrhagic fever may also occur. The word tibovirus is sometimes used to describe viruses transmitted by ticks, a superorder within the arthropods. Arboviruses maintain themselves in nature by going through a cycle between a host, an organism that carries the virus, and a vector, an organism that carries and transmits the virus to other organisms. Person-to-person transmission of arboviruses is not common, but can occur. Blood transfusions, organ transplantation, and the use of blood products can transmit arboviruses if the virus is present in the donor's blood or organs.

* Arnold-Chiari malformations (CMs) are structural defects in the cerebellum. They consist of a downward displacement of the cerebellar tonsils through the foramen magnum (the opening at the base of the skull), sometimes causing non-communicating hydrocephalus as a result of obstruction of cerebrospinal fluid (CSF) outflow. The cerebrospinal fluid outflow is caused by phase difference in outflow and influx of blood in the vasculature of the brain. CMs can cause headaches, difficulty focusing, concentrating, and thinking, as well as difficulty coping (with what most consider and experience as normal, everyday life), fatigue, muscle weakness, difficulty swallowing (sometimes accompanied by gagging), choking and vomiting, dizziness, nausea, tinnitus, impaired coordination, neck pain, unsteady gait (problems with balance), poor hand coordination (fine motor skills), numbness and tingling of the hands and feet, and speech problems (such as hoarseness).

* Bare lymphocyte syndrome (BLS) is a condition caused by mutations in certain genes of the major histocompatibility complex or involved with the processing and presentation of MHC molecules. It is a form of severe combined immunodeficiency. BLS I, also called "HLA class I deficiency", which is very rare, is associated with deficiencies. The genetic basis for BLSII is not due to defects in the MHC II genes themselves. The genetic basis is the result of mutations in genes that code for proteins (transcription factors) that normally regulate the expression (gene transcription) of the MHC II genes. That is, one of the several proteins that are required to switch on MHC II genes in various cells types (primarily those in the immune system) is absent. The result is that the immune system is severely compromised and cannot effectively fight infection. Clinically, this is similar to severe combined immunodeficiency (SCID), in which lymphocyte precursor cells are improperly formed. As a notable contrast, however, bare lymphocyte syndrome does not result in decreased B- and T-cell counts, as the development of these cells is not impaired. Diarrhea can be among the associated conditions.

* Basal cell nevus syndrome, also multiple basal cell carcinoma syndrome is an inherited medical condition involving defects within multiple body systems such as the skin, nervous system, eyes, endocrine system, and bones. People with this syndrome are particularly prone to developing a common and usually non-life-threatening form of non-melanoma skin cancer. About 10% of people with the condition do not develop basal cell carcinomas. Some or all of the following may be seen in someone with basal cell nevus yndrome: Multiple basal-cell carcinomas of the skin. Keratocystic odontogenic tumor: Seen in 75% of patients and is the most common finding. There are usually multiple lesions found in the mandible. They occur at a young age (19 yrs average). Rib and vertebrae anomalies. Intracranial calcification. Skeletal abnormalities: bifid ribs, kyphoscoliosis, early calcification of falx cerebri. Distinct faces: frontal and temporoparietal bossing, hypertelorism, and mandibular prognathism. Bilateral ovarian fibromas. 10% develop cardiac fibromas.

* Branched-chain ketoaciduria, also called Maple syrup urine disease (MSUD) is an autosomal recessive metabolic disorder affecting branched-chain amino acids. It is one type of organic acidemia. The condition gets its name from the distinctive sweet odor of affected infants' urine, particularly prior to diagnosis, and during times of acute illness. The smell is also present and sometimes stronger in the ear wax of an affected individual at these times. In populations to whom maple syrup is unfamiliar, the aroma can be likened to fenugreek, and fenugreek ingestion may impart the aroma to urine. Infants with this disease seem healthy at birth but quickly deteriorate, often with severe brain damage, which may be permanent. Death often occurs within the first five months in severe disease. The symptoms of MSUD may also present later depending on the severity of the disease. Untreated in older individuals, and during times of metabolic crisis, symptoms of the condition include anorexia, weight loss, anemia, diarrhea, vomiting, dehydration, lethargy, oscillating hypertonia and hypotonia, ataxia, seizures, hypoglycaemia, ketoacidosis, opisthotonus, pancreatitis, rapid neurological decline, and coma. Without prompt treatment, they will likely die from cerebral edema. Additionally, maple syrup urine disease patients often experience an abnormal course of disease in

simple infections that become increasingly severe and can have permanent damage. In more rare cases, concomitant osteoporosis may also appear in these patients.

* Caliciviridae is a family of viruses. They are positive-sense, single stranded RNA which is non-segmented. There are currently seven species in this family, divided among 5 genera. Diseases associated with this family include: feline calicivirus: respiratory disease; rabbit hemorrhagic disease virus: often-fatal hemorrhages; norwalk group of viruses: gastroenteritis. Caliciviruses naturally infect vertebrates, and have been found in a number of organisms such as humans, cattle, pigs, cats, chickens, reptiles, dolphins and amphibians. The caliciviruses have a simple construction and are not enveloped. Calicivirus infections commonly cause acute gastroenteritis, which is the inflammation of the stomach and intestines (e.g. the Norwalk Virus). Symptoms can include vomiting and diarrhea. These symptoms emerge after an incubation time of 2 days and the symptoms only generally last for 3 days. Most calicivirus infections do not call for medical attention, but those who are immunocompromised may need to be hospitalized for rehydration therapy.

* Cerebral gigantism or Sotos-Dodge syndrome is a rare genetic disorder characterized by excessive physical growth during the first years of life. Excessive growth often starts in infancy and continues into the early teen years. The disorder may be accompanied by autism, mild intellectual disability, delayed motor, cognitive, and social development, low muscle tone, and speech impairments. Children with Sotos syndrome tend to be large at birth and are often taller, heavier, and have relatively large skulls than is normal for their age. Signs of the disorder, which vary among individuals, include a disproportionately large skull with a slightly protrusive forehead, large hands and feet, large mandible, an abnormally increased distance between the eyes, large inter-pupillary distance, and downslanting eyes. Clumsiness, an awkward gait, and unusual aggressiveness or irritability may also occur. Although most cases of Sotos syndrome occur sporadically, familial cases have also been reported. It is similar to Weaver syndrome. Sotos syndrome is not a life-threatening disorder and patients may have a normal life expectancy. Developmental delays may improve in the school-age years; however, coordination problems may persist into adulthood, along with any learning disabilities and/ or other physical or mental issues. Incidence is approximately 1 in 14,000 births.

* Chancroid is a bacterial sexually transmitted infection characterized by painful sores on the genitalia. Chancroid is known to spread from one individual to another solely through sexual contact. Chancroid is a bacterial infection caused by the fastidious Gram-negative streptobacillus Haemophilus ducreyi. It is a disease found primarily in developing countries, most prevalent in low socioeconomic groups, associated with commercial sex workers. Most individuals diagnosed with chancroid have visited countries or areas where the disease is known to occur frequently, although outbreaks have been observed in association with crack cocaine use and prostitution. Chancroid is a risk factor for contracting HIV, due to their ecological association or shared risk of exposure, and biologically facilitated transmission of one infection by the other. H. ducreyi enters skin through microabrasions incurred during sexual intercourse. A local

tissue reaction leads to development of erythomatous papule, which progresses to pustule in 4–7 days. It then undergoes central necrosis to ulcerate. About half of infected men have only a single ulcer. Women frequently have four or more ulcers, with fewer symptoms. The initial ulcer may be mistaken as a "hard" chancre, the typical sore of primary syphilis, as opposed to the "soft chancre" of chancroid. Approximately one-third of the infected individuals will develop enlargements of the inguinal lymph nodes, the nodes located in the fold between the leg and the lower abdomen. Half of those who develop swelling of the inguinal lymph nodes will progress to a point where the nodes rupture through the skin, producing draining abscesses. The swollen lymph nodes and abscesses are often referred to as buboes.

* Cholangitis, also known as acute cholangitis or ascending cholangitis, is an infection of the bile duct (cholangitis), usually caused by bacteria ascending from its junction with the duodenum (first part of the small intestine). It tends to occur if the bile duct is already partially obstructed by gallstones. Cholangitis can be life-threatening, and is regarded as a medical emergency. Characteristic symptoms include yellow discoloration of the skin or whites of the eyes, fever, abdominal pain, and in severe cases, low blood pressure and confusion. In the elderly, the presentation may be atypical; they may directly collapse due to sepsis without first showing typical features. Those with an indwelling stent in the bile duct (see below) may not develop jaundice. Bile duct obstruction, which is usually present in acute cholangitis, is generally due to gallstones, 10–30% of cases however, are due to other causes.

* Chondroectodermal dysplasia or Ellis-van Creveld syndrome is an inherited disorder of bone growth that results in very short stature (dwarfism). People with this condition have particularly short forearms and lower legs and a narrow chest with short ribs. Ellis-van Creveld syndrome is also characterized by the presence of extra fingers and toes (polydactyly), malformed fingernails and toenails, and dental abnormalities. More than half of affected individuals are born with a heart defect, which can cause serious or life-threatening health problems. The features of Ellis-van Creveld syndrome overlap with those of another, milder condition called Weyers acrofacial dysostosis. Like Ellis-van Creveld syndrome, Weyers acrofacial dysostosis involves tooth and nail abnormalities, although affected individuals have less pronounced short stature and typically do not have heart defects. The two conditions are caused by mutations in the same genes.

* Colitis Ulcerative is a long-term condition that results in inflammation and ulcers of the colon and rectum. The primary symptom of active disease is abdominal pain and diarrhea mixed with blood. Weight loss, fever, and anemia may also occur. Often symptoms come on slowly and can range from mild to severe. Symptoms typically occur intermittently with periods of no symptoms between flares. Complications may include megacolon, inflammation of the eye, joints, or liver, and colon cancer. The clinical presentation of ulcerative colitis depends on the extent of the disease process. Patients usually present with diarrhea mixed with blood and mucus, of gradual onset that persists for an extended period (weeks). They may also have weight loss and blood on rectal examination. The inflammation caused by the disease along with the chronic bleeding from the GI tract leads to increased rates of anemia. The disease may be

accompanied by different degrees of abdominal pain, from mild discomfort to painful bowel movements or painful abdominal cramping with bowel movements. Ulcerative colitis is associated with a general inflammatory process that can affect many parts of the body. Sometimes these associated extra-intestinal symptoms are the initial signs of the disease, such as painful arthritic knees in teenager, which may be seen in adults also.

* Coloboma is a gap in part of the structures of the eye. This gap can be large or small and is normally in the bottom part of the eye. A Coloboma is caused when a baby's eyes do not develop properly during pregnancy. Coloboma can affect one eye (unilateral) or both eyes (bilateral). Coloboma can affect a number of different parts of the eye. A coloboma can affect the iris which is the coloured part at the front of the eye. It can affect the lens, the part of the eye which helps focus light onto the retina. Coloboma can also affect the choroid which is a thin network of blood vessels which help to keep the retina healthy. Finally, it can affect the retina at the back of the eye. Very rarely coloboma can also affect the optic disc or the eyelid. The affect coloboma has on vision depends a lot on which part of the eye is affected and how big the gap is. Normally the gap is at the bottom of the eye and runs from the front to the back of the eye. Most commonly coloboma only affects the iris, this type of coloboma often keeps fairly good vision. The pupil may be shaped a bit like a keyhole. There may have some problems with bright lights because the iris, which usually limit the amount of light entering the eye by controlling the size of the pupil may not work properly. Too much light entering the eye can cause discomfort and distort the image created.

* Cystinuria is an inherited disease that is characterized by high concentrations of the amino acid cystine in the urine, leading to the formation of cystine stones in the kidneys, ureter, and bladder Iinadequate reabsorption of cystine in the proximal convoluted tubules after the filtering of the amino acids by the kidney's glomeruli, results in an excessive concentration of this amino acid in the urine. Cystine may precipitate out of the urine, if the urine is neutral or acidic, and form crystals or stones in the kidneys, ureters, or bladder. It is a type of aminoaciduria. Although signs and symptoms are rare, there are some directly and indirectly associated with cystinuria. These sign and symptoms consist of 1) hematuria- blood in the urine, 2) flank pain – pain in the side due to kidney pain, 3) renal colic – intense, cramping pain due to stones in the urinary tract, 4) obstructive uropathy- urinary tract disease due to obstruction, and 5) urinary tract infections.

* Dandy–Walker syndrome (DWS) is a rare group of congenital human brain malformations. There are three subtypes which affect multiple organs to varying degrees, but the fundamental abnormalities involve the cerebellum which controls muscle coordination. The adjacent fourth ventricle is often affected which can alter the flow of cerebrospinal fluid, increase intracranial pressure, and lead to multiple other brain function problems. The degree of disability varies but is typically lifelong. The key features of this syndrome are an enlargement of the fourth ventricle; complete absence of the cerebellar vermis, the posterior midline area of cerebellar cortex responsible for coordination of the axial musculature; and cyst formation near the internal base of the

skull. An increase in the size of the fluid spaces surrounding the brain as well as an increase in pressure may also be present. The syndrome can appear dramatically or develop unnoticed. Symptoms, which often occur in early infancy, include slower motor development and progressive enlargement of the skull. In older children, symptoms of increased intracranial pressure such as irritability, vomiting, and convulsions and signs of cerebellar dysfunction such as unsteadiness and lack of muscle coordination or jerky movements of the eyes may occur. Other symptoms include increased head circumference, bulging at the back of the skull, problems with the nerves that control the eyes, face and neck, and abnormal breathing patterns. Dandy–Walker syndrome is frequently associated with disorders of other areas of the central nervous system including absence of the corpus callosum, the bundle of axons connecting the two cerebral hemispheres, and malformations of the heart, face, limbs, fingers and toes.

* Enchondromatosis is a form of osteochondrodysplasia characterized by a proliferation of enchondromas. An enchondroma is a type of noncancerous bone tumor that begins in cartilage. Cartilage is the gristly connective tissue from which most bones develop. Cartilage plays an important role in the growth process. There are many different types of cartilage in the body. An enchondroma most often affects the cartilage that lines the inside of the bones. It often affects the tiny long bones of the hands and feet. It may also affect other bones such as the thighbone (femur), upper arm bone (humerus), or one of the two lower leg bones (tibia). Enchondromas are the most common type of hand tumor. While it may affect a person at any age, it is most common between ages 10 and 20. It affects men and women equally. An enchondroma may not present symptoms at all. The following are the most common symptoms of an enchondroma. However, each person may experience symptoms differently. Symptoms may include: Hand pain, if the tumor is very large or if the affected bone has weakened and caused a hand fracture. Enlargement of the affected finger. Slow bone growth in the affected area.

* Endocarditis bacterial, also inefective endocarditis, is a form of endocarditis. It is an inflammation of the inner tissues of the heart, the endocardium, usually of the valves. It is caused by infectious agents, or pathogens, which are largely bacterial but a few other organisms can also be responsible. Before the age of modern antibiotics it was almost universally fatal. The valves of the heart do not receive any dedicated blood supply. As a result, defensive immune system mechanisms (such as white blood cells) cannot directly reach the valves via the bloodstream. If an organism (such as bacteria) attaches to a valve surface and forms a vegetation, the host's immune response is blunted. Normally, blood flows smoothly through these valves. If they have been damaged — from rheumatic fever, for example — the risk of bacterial attachment is increased. Fever occurs in 97% of people; malaise and endurance fatigue in 90% of people. A new or changing heart murmur, weight loss, and coughing occurs in 35% of people. Vascular phenomena: septic embolism (causing thromboembolic problems such as stroke or gangrene of fingers), Janeway lesions (painless hemorrhagic cutaneous lesions on the palms and soles), intracranial hemorrhage, conjunctival hemorrhage, splinter hemorrhages, kidney infarcts, and splenic infarcts. Immunologic phenomena: Glomerulonephritis which allows for blood and albumin to enter the urine, Osler's nodes (painful subcutaneous lesions in the distal fingers), Roth's spots on the retina, positive

serum rheumatoid factor. Other signs may include; night sweats, rigors, anemia, spleen enlargement.

* Erythremia, (or Polycythemia vera) is a neoplasm in which the bone marrow makes too many red blood cells. It may also result in the overproduction of white blood cells and platelets. Most of the health concerns associated with polycythemia vera are caused by the blood being thicker as a result of the increased red blood cells. It is more common in the elderly and may be symptomatic or asymptomatic. Common signs and symptoms include itching (pruritus), and severe burning pain in the hands or feet that is usually accompanied by a reddish or bluish coloration of the skin. Patients with polycythemia vera are more likely to have gouty arthritis. Patients with polycythemia vera can be asymptomatic. A classic symptom of polycythemia vera is pruritus or itching, particularly after exposure to warm water (such as when taking a bath), which may be due to abnormal histamine release or prostaglandin production. Such itching is present in approximately 40% of patients with polycythemia vera. Gouty arthritis may be present in up to 20% of patients. Peptic ulcer disease is also common in patients with polycythemia vera; most likely due to increased histamine from mast cells, but may be related to an increased susceptibility to infection with the ulcer-causing bacterium H. pylori. Another possible mechanism for the development for peptic ulcer is increased histamine release and gastric hyperacidity related with polycythemia vera. A classic symptom of polycythemia vera (and the related myeloproliferative disease essential thrombocythemia) is erythromelalgia. This is a burning pain in the hands or feet, usually accompanied by a reddish or bluish coloration of the skin. Erythromelalgia is caused by an increased platelet count or increased platelet "stickiness" (aggregation), resulting in the formation of tiny blood clots in the vessels of the extremity; it responds rapidly to treatment with aspirin. Patients with polycythemia vera are prone to the development of blood clots (thrombosis). A major thrombotic complication (e.g. heart attack, stroke, deep venous thrombosis, or Budd-Chiari syndrome) may sometimes be the first symptom or indication that a person has polycythemia vera. Headaches, lack of concentration and fatigue are common symptoms that occur in patients with polycythemia vera as well.

* Escherichia coli is a gram-negative, facultatively anaerobic, rod-shaped, coliform bacterium of the genus Escherichia that is commonly found in the lower intestine of warm-blooded organisms (endotherms). Most E. coli strains are harmless, but some serotypes can cause serious food poisoning in their hosts, and are occasionally responsible for product recalls due to food contamination. Most E. coli strains do not cause disease, but virulent strains can cause gastroenteritis, urinary tract infections, and neonatal meningitis. It can also be characterized by severe abdominal cramps, diarrhea that typically turns bloody within 24 hours, and sometimes fever. In rarer cases, virulent strains are also responsible for bowel necrosis (tissue death) and perforation without progressing to hemolytic-uremic syndrome, peritonitis, mastitis, septicemia, and gram-negative pneumonia.

* Esophageal atresia is a congenital medical condition (birth defect) that affects the alimentary tract. It causes the esophagus to end in a blind-ended pouch rather than

connecting normally to the stomach. It comprises a variety of congenital anatomic defects that are caused by an abnormal embryological development of the esophagus. It is characterized anatomically by a congenital obstruction of the esophagus with interruption of the continuity of the esophageal wall. It occurs in approximately 1 in 2500 live births. The presence of EA is suspected in an infant with excessive salivation (drooling) and in a newborn with drooling that is frequently accompanied by choking, coughing and sneezing. When fed, these infants swallow normally but begin to cough and struggle as the fluid returns through the nose and mouth. The infant may become cyanotic (turn bluish due to lack of oxygen) and may stop breathing as the overflow of fluid from the blind pouch is aspirated (sucked into) the trachea. The cyanosis is a result of laryngospasm (a protective mechanism that the body has to prevent aspiration into the trachea). Over time respiratory distress will develop.

* Fasciculation is simply a muscle twitch, or involuntary contraction of skeletal muscle fibers, that affects a small localized area. A fasciculation can occur anywhere in the body but are often most noticeable on the face. It can be caused by a number of common factors such as stress, vitamin deficiencies, or dehydration that have no long-term impact. It can also stem from some neurologic disorders, traumatic injuries, drug reactions, or poisoning. Extended periods of high stress can cause fasciculation, but usually these twitches don't begin until the body starts to relax after the stress eases. A deficiency in magnesium or calcium can also lead to muscle twitches and is usually able to be corrected by changes in diet or the addition of supplements. A vitamin D deficiency can lead to twitches because of its tendency to cause low absorption of calcium. Dehydration may cause fasciculation because of the body's tendency to lose both fluid and electrolytes at the same time; calcium and magnesium are some of the more common electrolytes needed for normal muscle function. Any muscle can experience these twitches, but they commonly occur in the eye area, in the tongue, and the larger muscles of the arms and legs.

* Fibromuscular dysplasia (FMD) is the abnormal development or growth of cells in the walls of the body's arteries. As a result of this growth, areas of the arteries can thicken, narrow and even enlarge, making it difficult for blood to flow through them. FMD most often affects the renal arteries, which supply the kidneys with blood, and carotid arteries, which bring blood to the brain. Less commonly, FMD develops in the arteries of the abdomen (mesenteric arteries) or the arteries of the arms and legs. In nearly one-third of people with FMD, more than one artery is affected. Depending on which arteries are affected, FMD can increase the risk of high blood pressure, impaired kidney function, aneurysm, stroke and other complications. FMD can increase risk of several conditions, including: High blood pressure: When the arteries become narrowed, blood pressure can increase. High blood pressure (hypertension) is the most common complication of FMD. Stroke: A stroke may occur if an aneurysm in one of the carotid arteries ruptures or if one of the carotid arteries dissects, disrupting the flow of blood to the brain. A tear in the artery (dissection): The lining of the artery wall may tear, causing blood to leak into the wall. Aneurysm: The pressure of blood flow through a narrowed artery can create a weakened area or bulge in the artery wall called an aneurysm. An aneurysm may rupture, resulting in a life-threatening situation. Pain or cramping in lower

legs (intermittent claudication): FMD that affects the arteries in the legs can cause discomfort or pain when walking and exercising. Kidney dysfunction or failure: Reduced blood flow to the kidneys can impair kidney function and, in rare cases, lead to kidney failure.

* Fucosidosis is a rare lysosomal storage disorder in which the FUCA1 gene experiences mutations that severely reduce or stop the activity of the alpha-L-fucosidase enzyme. The result is a buildup of complex sugars in parts of the body, which leads to death. Brain cells are especially sensitive to this buildup. Other results are progressive neurological deterioration, skin abnormalities, growth retardation, skeletal disease, and coarsening of facial features. Fucosidosis is the consequence of faulty degradation of both sphingolipids and polysaccharides. Major accumulation of the H-antigen (a member of the ABO blood group antigens), a glycolipid, is seen primarily in the liver of fucosidosis patients. Fucosidosis is one of nine identified glycoprotein storage diseases. The disease has three different types. Type 1 and 2 are considered severe, and Type 3 being a mild disease. Symptoms are highly variable with mild cases being able to live to within the third or fourth decade. Type 1 and 2 are both linked with mental retardation. Severe cases can develop life-threatening complications early in childhood. Type 1 usually begins somewhere in the first three to 18 months of age and in considered the most severe of the three types. Symptoms include: Coarse facial features, Enlarged liver, spleen, and/or heart, Intellectual disability, Seizures, Abnormal bone formation of many bones, Progressive deterioration of brain and spinal cord, Increased or decreased perspiration. Patients have no vascular lesions, but have rapid psychomotor regression, severe and rapidly progressing neurologic signs, elevated sodium and chloride excretion in the sweat, and fatal outcome before the sixth year. Type 2 appears when a child is around 18 months of age and in considered milder than Type 1 but still severe. Symptoms are similar to Type 1 but milder and progress more slowly. Type 3 appears around 1–2 years of age and is considered mild.

* Gastroschisis represents a congenital defect characterised by a defect in the anterior abdominal wall through which the abdominal contents freely protrude. There is no overlying sac or peritoneum, and the size of the defect is usually less than 4 centimetres (1.6 in). The abdominal wall defect is located at the junction of the umbilicus and normal skin, and is almost always to the right of the umbilicus. The defect occurs 5–8 weeks after conception, most likely due to a disruption of the blood supply to the developing abdominal wall. Gastroschisis as a stand-alone congenital defect, like many birth defects when isolated, exhibits multifactorial determination with a 2-3% recurrence risk for subsequent pregnancies.The morbidity is closely related to the presence of other malformations and complications of the wound or the intestine. The malformation is slightly more frequent in males than females. The frequency of gastroschisis is associated with young maternal age, low number of gestations, alcohol, tobacco and NSAID use, and infections. This abnormality was historically reported as having a ratio of 1:10,000 and is usually detected before birth. It has been reported that the incidence of gastroschisis has increased in recent years.

* Glutaric acidemia type 1 is an inherited disorder in which the body is unable to break

down completely the amino acids lysine, hydroxylysine and tryptophan. Excessive levels of their intermediate breakdown products (glutaric acid, glutaryl-CoA, 3-hydroxyglutaric acid, glutaconic acid) can accumulate and cause damage to the brain (and also other organs, but particularly the basal ganglia, which are regions that help regulate movement. GA1 causes secondary carnitine deficiency, as glutaric acid, like other organic acids, is detoxified by carnitine. Mental retardation may also occur. The severity of glutaric acidemia type 1 varies widely; some individuals are only mildly affected, while others have severe problems. GA1 can be defined as two clinical entities: GA1 before the encephalopathic crisis and GA1 after the encephalopathic crisis. Before the encephalopathic crisis, babies with glutaric acidemia type 1 often are born with unusually large heads (macrocephaly). After the encephalopatic crisis, affected individuals may have difficulty moving and may experience spasms, jerking, rigidity or decreased muscle tone and muscle weakness (which may be the result of secondary carnitine deficiency). Some individuals with glutaric acidemia have developed bleeding in the brain or eyes that could be mistaken for the effects of child abuse. Glutaric aciduria type 1, in many cases, can be defined as a cerebral palsy of genetic origins.

* Hamartoma is a mostly benign, focal malformation that resembles a neoplasm in the tissue of its origin. This is not a malignant tumor; it grows at the same rate as the surrounding tissue. It is composed of tissue elements normally found at that site, but they are growing in a disorganized manner. Hamartomas result from an abnormal formation of normal tissue, although the underlying reasons for the abnormality are not fully understood. They grow along with, and at the same rate as, the organ from whose tissue they are made, and, unlike cancerous tumors, only rarely invade or compress surrounding structures significantly. Hamartomas, while generally benign, can cause problems due to their location. For example, when located on the skin, especially on the face or neck, they can be very disfiguring. Cases have been reported of hamartomas the size of a small orange. They may obstruct practically any organ in the body, such as the colon, eye, etc. They are particularly likely to cause major health issues when located in the hypothalamus, kidneys, lips, or spleen.

* Helminthiasis, also known as worm infection, is any macroparasitic disease of humans and other animals in which a part of the body is infected with parasitic worms, known as helminths. There are numerous species of these parasites, which are broadly classified into tapeworms, flukes, and roundworms. They often live in the gastrointestinal tract of their hosts, but they may also burrow into other organs, where they induce physiological damage. Soil-transmitted helminthiasis and schistosomiasis are the most important helminthiases, and are among the neglected tropical diseases. Helminthiasis has been found to result in poor birth outcome, poor cognitive development, poor school and work performance, poor socioeconomic development, and poverty. Chronic illness, malnutrition, and anemia are further examples of secondary effects.

* Histidinemia, also referred to as histidinuria, is a rare autosomal recessive metabolic disorder caused by a deficiency of the enzyme histidase. Histidase is needed for the metabolism of the amino acid histidine. Histidenemia is characterized by increased

levels of histidine, histamine and imidazole in blood, urine and cerebrospinal fluid. This also results in decreased levels of the metabolite urocanic acid in blood, urine, and skin cells. Histidinemia is considered benign as most patients remain asymptomatic. The combination of histidinemia and a medical complication during or soon after birth (such as a temporary lack of oxygen) might increase a person's chances of developing intellectual disability, behavioral problems, or learning disorders.

* Hordeolum is a small red bump which forms on the eyelid as a result of a clogged sebaceous gland. You might be more familiar with this condition's common name, “sty.” Whether you call it a hordeolum or a sty, this infection is usually benign, albeit irritating. The difference between sty and chalazion is that a chalazion is caused by noninfectious meibomian gland occlusion, whereas a hordeolum usually is caused by infection.Left untreated, a hordeolum could burst, spreading bacteria across the eye and contributing to a more serious infection. The early signs that a hordeolum is on the way include tenderness, redness, and mild swelling along the eyelid. Shortly after these early symptoms appear, a small bump emerges, and the eyelid tends to swell more dramatically. The eye itself may water and develop sensitivity to light, and blinking is usually painful. In some cases, the eyelid may swell so much that it is difficult to open the eye fully.

* Hyperhidrosis or excessive sweating is a common disorder affecting many people. Palmar hyperhidrosis or sweaty palms is the most common form of hyperhidrosis, causing excessive sweating of the hands. Hyperhidrosis can also cause excessive foot, underarm and facial sweating. It is thought that hyperhidrosis is a result of over activity of the sympathetic nervous system. Sweating is often uncontrollable, embarrassing and not anticipated . Normal sweating is needed for thermal regulation however in people suffering from hyperhidrosis, sweating exceeds the bodys need for physiological thermal regulation. People don’t get used to living with hyperhidrosis but they continue to suffer throughout their lives from it. Hyperhidrosis can have severe physiological consequences such as cold and clammy hands, dehydration, and skin infections secondary to maceration of the skin. Hyperhidrosis can also have devastating emotional effects on one’s individual life. Affected people are constantly aware of their condition and try to modify their lifestyle to accommodate this problem. This can be disabling in professional, academic and social life, causing daily embarrassments. Many routine tasks become impossible chores, which can psychologically drain these individuals on a constant basis.

* Hyperimmunoglobulinemia E syndrome (HIES), of which the autosomal dominant form (AD-HIES) is called Job's syndrome or Buckley syndrome, is a condition that affects several body systems, particularly the immune system. Recurrent infections are common in people with this condition. Affected individuals tend to have frequent bouts of pneumonia, which are caused by certain kinds of bacteria that infect the lungs and cause inflammation. These infections often result in the formation of air-filled cysts (pneumatoceles) in the lungs. Recurrent skin infections and an inflammatory skin disorder called eczema are also very common in AD-HIES. These skin problems cause rashes, blisters, accumulations of pus (abscesses), open sores, and scaling. AD-HIES

is characterized by abnormally high levels of an immune system protein called immunoglobulin E (IgE) in the blood. IgE normally triggers an immune response against foreign invaders in the body, particularly parasitic worms, and plays a role in allergies. It is unclear why people with AD-HIES have such high levels of IgE. AD-HIES also affects other parts of the body, including the bones and teeth. Many people with AD-HIES have skeletal abnormalities such as an unusually large range of joint movement (hyperextensibility), an abnormal curvature of the spine (scoliosis), reduced bone density (osteopenia), and a tendency for bones to fracture easily. Dental abnormalities are also common in this condition. The primary (baby) teeth do not fall out at the usual time during childhood but are retained as the adult teeth grow in. Other signs and symptoms of AD-HIES can include abnormalities of the arteries that supply blood to the heart muscle (coronary arteries), distinctive facial features, and structural abnormalities of the brain, which do not affect a person's intelligence.

* Hypothyroidism, also called underactive thyroid or low thyroid, is a common disorder of the endocrine system in which the thyroid gland does not produce enough thyroid hormone. It can cause a number of symptoms, such as poor ability to tolerate cold, a feeling of tiredness, constipation, depression, and weight gain. Occasionally there may be swelling of the front part of the neck due to goitre. Untreated hypothyroidism during pregnancy can lead to delays in growth and intellectual development in the baby, which is called cretinism. Worldwide, too little iodine in the diet is the most common cause of hypothyroidism. Hypothyroidism is more common in women than men. People over the age of 60 are more commonly affected. Dogs are also known to develop hypothyroidism and in rare cases cats and horses can also have the disorder. People with hypothyroidism often have no or only mild symptoms. Numerous symptoms and signs are associated with hypothyroidism, and can be related to the underlying cause, or a direct effect of having not enough thyroid hormones.

* Idiopathic scrotal calcinosis, also known as idiopathic calcified nodules of the scrotum is a cutaneous condition characterized by calcification of the skin resulting from the deposition of calcium and phosphorus occurring on the scrotum. However, the levels of calcium and phosphate in the blood are normal. Idiopathic scrotal calcinosis typically affects young males, with an onset between adolescence and early adulthood. The scrotal calcinosis appears, without any symptoms, as yellowish nodules that range in size from 1 mm to several centimeters.

* Jaundice can occur in babies, children, and adults. Jaundice is not an illness in itself, but a medical condition in which too much bilirubin - a compound produced by the breakdown of hemoglobin from red blood cells - is circulating in the blood. The excess bilirubin causes the skin, eyes, and mucus membranes in the mouth to turn a yellowish color. Because bilirubin is processed by the liver, the symptoms of jaundice may indicate damage to the liver in adults. If the cause is not identified and treated, it can lead to liver failure. In newborn babies, though, jaundice is common because they have extra red blood cells that begin to break down soon after they are born and their liver is often slower to process bilirubin.

* Keratoconus is a disorder of the eye which results in progressive thinning of the cornea. This may result in blurry vision, double vision, nearsightedness, astigmatism, and light sensitivity. Usually both eyes are affected. In more severe cases a scarring or a circle may be seen within the cornea. Keratoconus affects about 1 in 2000 people. It occurs most commonly in late childhood to early adulthood. While it occurs in all populations it may be more frequent in certain ethnic groups such as those of Asian descent. People with early keratoconus typically notice a minor blurring of their vision. At early stages, the symptoms of keratoconus may be no different from those of any other refractive defect of the eye. As the disease progresses, vision deteriorates, sometimes rapidly. Visual acuity becomes impaired at all distances, and night vision is often poor. Some individuals have vision in one eye that is markedly worse than that in the other. The disease is often bilateral, though asymmetrical. Some develop photophobia (sensitivity to bright light), eye strain from squinting in order to read, or itching in the eye, but there is normally little or no sensation of pain. It may cause luminous objects to appear as cylindrical pipes with the same intensity at all points. The classic symptom of keratoconus is the perception of multiple "ghost" images, known as monocular polyopia. People also commonly notice streaking and flaring distortion around light sources.

* Lateral bulbar syndrome is a disorder in which the patient has a constellation of neurologic symptoms due to injury to the lateral part of the medulla in the brain, resulting in tissue ischemia and necrosis. his syndrome is characterized by sensory deficits affecting the trunk (torso) and extremities on the opposite side of the infarction and sensory deficits affecting the face and cranial nerves on the same side with the infarct. Specifically, there is a loss of pain and temperature sensation on the contralateral (opposite) side of the body and ipsilateral (same) side of the face. Affected persons have difficulty in swallowing (dysphagia) resulting from involvement of the nucleus ambiguus, as well as slurred speech (dysarthria) and disordered vocal quality (dysphonia) . Damage to the spinal trigeminal nucleus causes absence of pain on the ipsilateral side of the face, as well as an absent corneal reflex. Nystagmus and vertigo may result in falling, caused from involvement of the region of Deiters' nucleus and other vestibular nuclei. Onset is usually acute with severe vertigo.

* Lichen sclerosus et atrophicus (LSetA) or lichen sclerosus (LS), is a disease of unknown cause that results in white patches on the skin, which may cause scarring on and around genital or sometimes other skin. There is a bimodal age distribution in the incidence of LS. It occurs in females with an average age of diagnosis of 7.6 years in girls and 60 years old in women. The average age of diagnosis in boys is 9–11 years old. Several risk factors have been proposed, including autoimmune diseases, infections and genetic predisposition. There is evidence that LS can be associated with thyroid disease. Women are more commonly affected than men (10 to 1 ratio), particularly around and after menopause, but younger women or girls may also develop the disease. The condition most commonly occurs on the vulva and around the anus with ivory-white elevations that may be flat and glistening. There may be marked itching or the condition may be without any symptoms. There may also be thinning and shrinkage of the genital area that may make coitus, urination, and defecation painful. In

males, the disease may take the form of whitish thickening of the foreskin, which cannot be retracted easily (phimosis). In contrast to women, there is no perianal involvement. In men, this genital involvement has traditionally been known as balanitis xerotica obliterans (BXO). Only 6% of LS are isolated extragenital lesions. On the non-genital skin, the disease may manifest as porcelain-white spots with small visible plugs inside the orifices of hair follicles or sweat glands on the surface. Thinning of the skin may also occur.

* Lymphoproliferative disorders (LPDs) refer to several conditions in which lymphocytes are produced in excessive quantities. They typically occur in people who have a compromised immune system. They are sometimes equated with "immunoproliferative disorders", but technically lymphoproliferative disorders are a subset of immunoproliferative disorders, along with hypergammaglobulinemia and paraproteinemias. Lymphoproliferative disorders are a set of disorders characterized by the abnormal proliferation of lymphocytes into a monoclonal lymphocytosis. The two major types of lymphocytes are B cells and T cells, which are derived from pluripotent hematopoetic stem cells in the bone marrow. Individuals who have some sort of dysfunction with their immune system are susceptible to develop a lymphoproliferative disorder because when any of the numerous control points of the immune system become dysfunctional, immunodeficiency or deregulation of lymphocytes is more likely to occur. Lymph nodes are distributed throughout the body to fight against infection. The spleen, located in the left upper section of the abdomen, stores blood and also protects the body against infection. In those with a lymphoproliferative disorder, increased lymphocytes in the bloodstream can lead to the enlargement of the lymph nodes and the spleen. Many of these disorders originate from inherited conditions and sometimes are caused by acquired immune system dysfunction. Other cases, however, have no known cause.

* Medullary sponge kidney is a congenital disorder of the kidneys characterized by cystic dilatation of the collecting tubules in one or both kidneys. Individuals with medullary sponge kidney are at increased risk for kidney stones and urinary tract infection (UTI). Patients with MSK typically pass twice as many stones per year as do other stone formers without MSK. While described as a "benign" disorder with a low morbidity rate, as many as 10% of patients with MSK have an increased risk of morbidity associated with frequent stones and UTIs. While some patients report increased chronic kidney pain, the source of the pain, when a UTI or blockage is not present, is unclear at this time. Renal colic (flank and back pain) is present in 55% of patients. Women with MSK experience more stones, UTIs, and complications than men. Most cases are asymptomatic or are discovered during an investigation of blood in the urine. Symptomatic patients typically present as middle-aged adults with renal colic, kidney stones, nephrocalcinosis and/or recurrent urinary tract infections; however, MSK also may affect children very rarely. In addition to the typical clinical phenotype of recurrent stone disease, other clinical profiles have now been recognized, that is, an indolent, almost asymptomatic MSK, and a rare form characterized by intractable pain.

* Nephritis familial or Alport syndrome is a genetic disorder affecting around 1 in 50,000

children, characterized by glomerulonephritis, end-stage kidney disease, and hearing loss. Alport syndrome can also affect the eyes, though the changes do not usually affect sight, except when changes to the lens occur in later life. Blood in urine is universal. Proteinuria is a feature as kidney disease progresses.

* Neuroendocrine tumors (NETs) are neoplasms that arise from cells of the endocrine (hormonal) and nervous systems. Many are benign, while some are malignant. They most commonly occur in the intestine, where they are often called carcinoid tumors, but they are also found in the pancreas, lung and the rest of the body. Although there are many kinds of NETs, they are treated as a group of tissue because the cells of these neoplasms share common features, such as looking similar, having special secretory granules, and often producing biogenic amines and polypeptide hormones. In the category of Gastroenteropancreatic neuroendocrine tumors (GEP-NET), carcinoids most commonly affect the small bowel, particularly the ileum, and are the most common malignancy of the appendix. Many tumors do not cause symptoms even when they have metastasized. Other tumors even if very small can produce adverse effects by secreting hormones. A carcinoid crisis with profound flushing, bronchospasm, tachycardia, and widely and rapidly fluctuating blood pressure can occur if large amounts of hormone are acutely secreted, which is occasionally triggered by factors such as diet, alcohol, surgery chemo therapy, embolization therapy or radiofrequency ablation. About one third of GEP-NETs are Pancreatic neuroendocrine tumors (PanNETs) often referred to as "islet cell tumors", or "pancreatic endocrine tumors". PanNETs are quite distinct from the usual form of pancreatic cancer, adenocarcinoma, which arises in the exocrine pancreas. Well or intermediately differentiated PanNETs are sometimes called islet cell tumors. In addition to the two main categories of GEP-NET, there are rarer forms of neuroendocrine tumors that arise anywhere in the body, including within the lung, thymus and parathyroid. Bronchial carcinoid can cause airway obstruction, pneumonia, pleurisy, difficulty with breathing, cough, and hemoptysis, or may be associated with weakness, nausea, weight loss, night sweats, neuralgia, and Cushing’s syndrome. Some are asymptomatic.

* Pericardial cysts are an uncommon benign congenital anomaly of the anterior and middle mediastinum. In their vast majority pericardial cysts are caused by congenital abnormalities. The cyst wall is composed of connective tissue and a single layer of mesothelial cells, and usually contains clear fluid.They are preferentially found in the right anterior cardiophrenic angle, but can be found almost anywhere adjacent to the heart. They occur more commonly on the right side. Most patients have no symptoms. A small number of patients may have chest tightness, chest expansion, chest pain or ascites, edema of the body. If the cyst is too large, they can have shortness of breath, coughing, occasional palpitations, paroxysmal tachycardia or difficulty swallowing. Life-threatening emergencies such as cardiac tamponade, obstruction of right main stem bronchus, and sudden death may occur. A few pericardial cysts resolve spontaneously, likely from rupture into the pleural space. When the cyst is located in the anterior mediastinum, just before the heart, it can produce symptoms of oppression, shortness of breath, fatigue and chest pain.

* Phenylketonuria (PKU) is an inborn error of metabolism that results in decreased metabolism of the amino acid phenylalanine. Untreated PKU can lead to intellectual disability, seizures, behavioral problems, and mental disorder. It may also result in a musty smell and lighter skin. The damage done to the brain if PKU is untreated during the first months of life is not reversible. It is critical to control the diet of infants with PKU very carefully so that the brain has an opportunity to develop normally. Affected children who are detected at birth and treated are much less likely to develop neurological problems or have seizures and intellectual disability.

* Pneumothorax is an abnormal collection of air in the pleural space that causes an uncoupling of the lung from the chest wall. Symptoms typically include sudden onset of sharp, one sided, chest pain and shortness of breath. In a minority of cases the amount of air in the chest increases when a one-way valve is formed by an area of damaged tissue, leading to a tension pneumothorax. This condition can cause a steadily worsening oxygen shortage and low blood pressure. Unless reversed by effective treatment, it can result in death. Very rarely both lungs may be affected by a pneumothorax. A primary pneumothorax is one that occurs without an apparent cause and in the absence of significant lung disease, while a secondary pneumothorax occurs in the presence of existing lung disease. Smoking increases the risk as do lung diseases including COPD, asthma, and tuberculosis. A pneumothorax can also be caused by physical trauma to the chest (including a blast injury), or as a complication of a healthcare intervention. The symptoms of pneumothorax can be vague and inconclusive, especially in those with a small collapsed area. In contrast, tension pneumothorax is a medical emergency which may present symptoms such as severe hypoxia, very low blood pressure, or an impaired level of consciousness.

* Poliodystrophia cerebri or Alpers' disease is a progressive degenerative disease of the central nervous system that occurs mostly in infants and children. First signs of the disease, which include intractable seizures and failure to meet meaningful developmental milestones, usually occur in infancy, after the first year of life, but sometimes as late as the fifth year. Primary symptoms of the disease are developmental delay, progressive intellectual disability, hypotonia (low muscle tone), spasticity (stiffness of the limbs) possibly leading to quadriplegia, and progressive dementia. Seizures may include epilepsia partialis continua, a type of seizure that consists of repeated myoclonic (muscle) jerks. Optic atrophy may also occur, often leading to blindness. Deafness may also occur. And, although physical signs of chronic liver dysfunction may not be present, many patients suffer liver impairment leading to liver failure. Pathologically, there is status spongiosus of the cerebral grey matter. Alpers' disease is caused by an underlying mitochondrial metabolic defect of POLG gene.

* Polyomaviridae is a family of viruses whose natural hosts are primarily mammals and birds. Most of these viruses, such as BK virus and JC virus, are very common and typically asymptomatic in most human populations studied. However, some polyomaviruses are associated with human disease, particularly in immunocompromised individuals; BK virus is associated with nephropathy in renal transplant and non-renal solid organ transplant patients, JC virus with progressive

multifocal leukoencephalopathy, and Merkel cell virus with Merkel cell cancer. Some members of the family are oncoviruses, meaning they can cause tumors; they often persist as latent infections in a host without causing disease, but may produce tumors in a host of a different species, or in individuals with ineffective immune systems.

* Progressive supranuclear ophthalmoplegia, also Progressive supranuclear palsy (PSP) is a degenerative disease involving the gradual deterioration and death of specific volumes of the brain. Males and females are affected approximately equally and there is no racial, geographical or occupational predilection. Approximately 6 people per 100,000 population have PSP. It has been described as a tauopathy. The initial symptoms in two-thirds of cases are loss of balance, lunging forward when mobilizing, fast walking, bumping into objects or people, and falls. Other common early symptoms are changes in personality, general slowing of movement, and visual symptoms. Later symptoms and signs are dementia (typically including loss of inhibition and ability to organize information), slurring of speech, difficulty swallowing, and difficulty moving the eyes, particularly in the vertical direction. The latter accounts for some of the falls experienced by these patients as they are unable to look up or down. Some of the other signs are poor eyelid function, contracture of the facial muscles, a backward tilt of the head with stiffening of the neck muscles, sleep disruption, urinary incontinence and constipation.

* Pulmonary alveolar proteinosis (abbreviated PAP), is a rare lung disease in which abnormal accumulation of pulmonary surfactant occurs within the alveoli, interfering with gas exchange. PAP can occur in a primary form or secondarily in the settings of malignancy (especially in myeloid leukemia), pulmonary infection, or environmental exposure to dusts or chemicals. The symptoms of PAP include: dyspnea (shortness of breath), cough, low grade fever, weight loss. The clinical course of PAP is unpredictable. Spontaneous remission is recognized; some patients have stable symptoms. Death may occur due to progression of PAP or due to the underlying disease associated with PAP. Individuals with PAP are more vulnerable to infection of the lung by bacteria or fungi. The disease is more common in males and in tobacco smokers. In a recent epidemiologic study from Japan, Autoimmune PAP has an incidence and prevalence higher than previously reported and is not strongly linked to smoking, occupational exposure, or other illnesses. Endogenous lipoid pneumonia and non-specific interstitial pneumonitis has been seen prior to the development of PAP in a child.

* Pulmonary hypertension is a condition that happens when the small- and medium-sized blood vessels in the lungs become stiff and thick or blocked. This causes blood pressure in the lungs to rise, and forces the right side of the heart to work harder to get blood to the lungs. Over time, the disease can cause serious damage to the lungs, heart and arteries. It also increases the risk of blood clots in the lungs. When the walls of the blood vessels are too thick, oxygen and carbon dioxide cannot properly flow in and out of the blood stream. Less oxygen in the blood causes arteries to narrow even more, making the high blood pressure worse. Over time, damage to the heart occurs. The muscles of the lower right chamber (the right ventricle) become thicker and larger (a condition called cor pulmonale). They are not able to pump blood efficiently. This can

cause heart failure. Early symptoms of pulmonary hypertension are often mistaken for being out of shape, such as: Shortness of breath when active, Lightheadedness, Tiring easily, Chest pain like angina, Achy joints. Patients who have an underlying cause for the condition may have coughing and wheezing. When the heart has been damaged by the condition, a person may have swelling in their legs. Pulmonary hypertension has no known cause in most cases. Women are twice as likely as men to develop pulmonary hypertension. Half of people with the disease are diagnosed after age 35. Other lung conditions may cause pulmonary hypertension. Diseases that interfere with the flow of blood in the lungs or the amount of oxygen that gets into the blood may cause pulmonary hypertension. Diseases that are sometimes linked with pulmonary hypertension include chronic obstructive pulmonary disease, cystic fibrosis or occupational lung diseases.

* Pulmonary sarcoidosis is a disease involving abnormal collections of inflammatory cells that form lumps known as granulomas. The disease usually begins in the lungs, skin, or lymph nodes. Less commonly affected are the eyes, liver, heart, and brain. Any organ, however, can be affected. The signs and symptoms depend on the organ involved. Often there are no, or only mild, symptoms. When it affects the lungs there may be wheezing, cough, shortness of breath, or chest pain. Some may have Löfgren syndrome in which there is fever, large lymph nodes, arthritis, and a rash known as erythema nodosum. The cause of pulmonary sarcoidosis is unknown. Some believe it may be due to an immune reaction to a trigger such as an infection or chemicals in those who are genetically predisposed. Those with affected family members are at greater risk. Findings that make it likely include large lymph nodes at the root of the lung on both sides, high blood calcium with a normal parathyroid hormone level, or elevated levels of angiotensin converting enzyme (ACE) in the blood. In 2013 pulmonary sarcoidosis and interstitial lung disease affected 595,000 people globally. These two diseases resulted in 471,000 deaths globaly between 1990 and 2013. It is most common in Scandinavians but occurs in all parts of the world. In the United States risk is greater among black as opposed to white people. It usually begins between the ages of 20 and 50. It occurs more often in women than men. Common symptoms, which tend to be vague, include fatigue (unrelieved by sleep; occurs in 66% of cases), lack of energy, weight loss, joint aches and pains (which occur in about 70% of cases), arthritis (14–38% of persons), dry eyes, swelling of the knees, blurry vision, shortness of breath, a dry, hacking cough, or skin lesions. Less commonly, people may cough up blood. The cutaneous symptoms vary, and range from rashes and noduli (small bumps) to erythema nodosum, granuloma annulare, or lupus pernio.

* Renal osteodystrophy is a bone disease that occurs when the kidneys fail to maintain proper levels of calcium and phosphorus in the blood. It's common in people with kidney disease and affects most dialysis patients. Renal osteodystrophy is most serious in children because the condition slows bone growth and causes deformities and short stature. Symptoms of renal osteodystrophy aren't usually seen in adults until they have been on dialysis for several years. If left untreated, bones thin and weaken, and symptoms include bone and joint pain, and an increased risk of fractures. In a patient with kidney failure, the kidneys stop making calcitriol, a form of vitamin D. The body

then can't absorb calcium from food and starts removing it from the bones. The bone changes from renal osteodystrophy can begin many years before symptoms appear in adults with kidney disease. For this reason, it's called the "silent crippler." The symptoms of renal osteodystrophy aren't usually seen in adults until they have been on dialysis for several years. Older patients and women who have gone through menopause are at greater risk for this disease because they're already vulnerable to osteoporosis, another bone disease, even without kidney disease.

* Tumor virus,, also cancer virus or oncovirus refers to any virus with a cancer causing DNA or RNA genome. The vast majority of human and animal viruses do not cause cancer, probably because of longstanding co-evolution between the virus and its host. Generally, tumor viruses cause little or no disease after infection in their hosts, or cause non-neoplastic diseases such as acute hepatitis for hepatitis B virus or mononucleosis for Epstein-Barr virus. A minority of persons (or animals) will go on to develop cancers after infection. Generally, tumor viruses cause little or no disease after infection in their hosts, or cause non-neoplastic diseases such as acute hepatitis for hepatitis B virus or mononucleosis for Epstein-Barr virus. A minority of persons (or animals) will go on to develop cancers after infection. Tumor viruses come in a variety of forms: Viruses with a DNA genome, such as adenovirus, and viruses with an RNA genome, like the Hepatitis C virus (HCV), can cause cancers, as can retroviruses having both DNA and RNA genomes (Human T-lymphotropic virus and hepatitis B virus, which normally replicates as a mixed double and single-stranded DNA virus but also has a retroviral replication component). Some viruses are tumorigenic when they infect a cell and persist as circular episomes or plasmids, replicating separately from host cell DNA (Epstein-Barr virus and Kaposi's sarcoma-associated herpesvirus). Other viruses are only carcinogenic when they integrate into the host cell genome as part of a biological accident, such as polyomaviruses and papillomaviruses. A direct oncogenic viral mechanism involves either insertion of additional viral oncogenic genes into the host cell or to enhance already existing oncogenic genes (proto-oncogenes) in the genome. Indirect viral oncogenicity involves chronic nonspecific inflammation occurring over decades of infection, as is the case for HCV-induced liver cancer.

* Urethritis is inflammation of the urethra. The most common symptom is painful or difficult urination. In addition to pain, urethritis symptoms include: Feeling the frequent or urgent need to urinate. Difficulty starting urination. It is usually caused by infection with bacteria. The infection is often a sexually transmitted infection (STI), but some are just non-STI urinary tract infections. The disease is classified as either gonococcal urethritis, caused by Neisseria gonorrhoeae, or non-gonococcal urethritis (NGU), most commonly caused by Chlamydia trachomatis. NGU, sometimes called nonspecific urethritis (NSU), has both infectious and noninfectious causes. Other causes include: Adenoviridae, Uropathogenic Escherichia coli (UPEC), Herpes simplex, Cytomegalovirus, Mycoplasma genitalium, Reactive arthritis, Trichomonas vaginalis, Ureaplasma urealyticum, Methicillin-resistant Staphylococcus aureus, Group B streptococcus. In female patients, urethritis can be caused by pelvic inflammatory disease.

* Wiskott–Aldrich syndrome (WAS) is a rare X-linked recessive disease characterized

by eczema, thrombocytopenia (low platelet count), immune deficiency, and bloody diarrhea (secondary to the thrombocytopenia). The disease occurs only in males. The first signs of WAS are usually petechiae and bruising, resulting from a low platelet count. Spontaneous nose bleeds and bloody diarrhea are common. Eczema develops within the first month of life. Recurrent bacterial infections develop by three months. Enlargement of the spleen is not an uncommon finding. The majority of WAS children develop at least one autoimmune disorder, and cancers (mainly lymphoma and leukemia) develop in up to a third of patients. Immunoglobulin M (IgM) levels are reduced, IgA and IgE are elevated, and IgG levels can be normal, reduced, or elevated. In Wiskott–Aldrich syndrome, the platelets are small and do not function properly. They are removed by the spleen, which leads to low platelet counts. The immune deficiency is caused by decreased antibody production, and the inability of T cells to become polarized. This leads to increased susceptibility to infections, particularly of the ears and sinuses. T cells are unable to reorganize their actin cytoskeleton.

1.1.24 RTS-16

https://archive.org/details/Resonant_Therapy_Sessions_16

Antithrombin III Deficiency; Astrocytoma; Ataxia Telangiectasia; Blepharospasm; Bloom Syndrome; Bowen Disease; Burkholderia Infections; Cancer-Islet Cell Carcinoma; Cancer-Lymphoma; Cancer-Otorhinolaryngologic; Cancer-Parathyroid; Cancer-Sarcoma General; Cancer-Sezary Syndrome; Chondrosarcoma; Coxsackie Virus Infections; Creeping Eruption; Currarino Syndrome; Cystinosis; Dientamoebiasis; Dystrophia Brevicollis Congenita; Echinococcosis; Fibrous Dyplasia Polyostotic; Fibrous Dysplasia of Bone; Giant Lymph Node Hyperplasia; Gilbert Disease; Glycogenosis; Holmes-Adie Syndrome; Hypoplastic Left Heart Syndrome; Kuru Encephalopathy; Lipodystrophy Intestinal; Lymphogranuloma Venereum; Microvascular Angina; Neuroleptic Malignant Syndrome; Olivopontocerebellar Atrophies; Paralysis Bulbar; Paroxysmal Hemoglobinuria; Perineurial Cysts; Pityriasis; Poland Syndrome; Progressive Intracranial Occlusive Arteriopathy; Proteus Syndrome; Pseudomonas Infections; Quadriplegia; Rat-Bite Fever; Retinoschisis; Rubinstein-Taybi Syndrome; Sarcoma Osteogenic; Sclerosis Hereditary Spinal; Sezary Syndrome; Stevens-Johnson Syndrome; Strongyloidiasis; Teratoma; Tuberous Sclerosis; Tumor Breast Non-Malignant; Tumor General Non-Malignant; Uveomeningoencephalitis; Vasospasm Intracranial; Waardenburg Syndrome; Xanthomatosis; Zellweger Syndrome;

* Antithrombin III deficiency is a blood disorder characterized by the tendency to form clots in the veins (thrombosis). An inherited tendency to thrombosis is known as thrombophilia. Antithrombin is a substance in the blood that limits the blood's ability to clot (coagulation). In people with congenital antithrombin deficiency, there is a reduced amount of this substance in the blood due to a genetic abnormality. Antithrombin

deficiency may also be acquired. The type of blood clots seen in individuals with this condition are typically clots that form in the deep veins of the leg (deep vein thrombosis or DVT) and clots that lodge in the lungs (pulmonary embolism or PE). Approximately 50% of individuals with antithrombin deficiency will develop one or more clots in their lifetime, usually after adolescence. Factors that may increase the likelihood of clotting include pregnancy, the use of oral contraceptives, surgery, increasing age, and a lack of movement. Blood clots can cause swelling, pain, or shortness of breath. Other symptoms of blood clots include dizziness, headache, changes in vision, lack of concentration, confusion, slurred speech, numbness, tingling, and weakness in the arms or legs. Blood clots may become life threatening if not recognized and treated early.

* Astrocytoma brain tumors are a form of glioma with star-shaped cells. They often grow very slowly or not at all for long periods of time. General symptoms of an astrocytoma tumor are a result of growing pressure inside the skull. These symptoms include headache, vomiting and mental status changes. Other symptoms, such as drowsiness, lethargy, obtuseness, personality changes, disordered conduct and impaired mental faculties show up early in about one out of every four patients with malignant brain tumors. In young children, the growing pressure of an astrocytoma tumor inside the skull may enlarge the head. Changes (such as swelling) may be observed in the back of the eye, where the blind spot is. Usually there are no changes in temperature, blood pressure, pulse or respiratory rates except just before death. Seizures are more common with meningiomas, slow-growing astrocytomas and oligodendrogliomas than with malignant gliomas. Symptoms of an astrocytoma tumor vary depending on what part of the brain (or which glands or nerves) are affected by the tumor. Sometimes the nature of the seizures can help determine the location of the brain tumor.

* Ataxia-telangiectasia is a rare inherited disorder that affects the nervous system, immune system, and other body systems. This disorder is characterized by progressive difficulty with coordinating movements (ataxia) beginning in early childhood, usually before age 5. The movement problems typically cause people to require wheelchair assistance by adolescence. People with this disorder also have slurred speech and trouble moving their eyes to look side-to-side (oculomotor apraxia). Small clusters of enlarged blood vessels called telangiectases, which occur in the eyes and on the surface of the skin, are also characteristic of this condition. Affected individuals tend to have high amounts of a protein called alpha-fetoprotein (AFP) in their blood. The level of this protein is normally increased in the bloodstream of pregnant women, but it is unknown why individuals with ataxia-telangiectasia have elevated AFP or what effects it has in these individuals. People with ataxia-telangiectasia often have a weakened immune system, and many develop chronic lung infections. They also have an increased risk of developing cancer, particularly cancer of blood-forming cells (leukemia) and cancer of immune system cells (lymphoma). Affected individuals are very sensitive to the effects of radiation exposure, including medical x-rays. The life expectancy of people with ataxia-telangiectasia varies greatly, but affected individuals typically live into early adulthood.

* Blepharospasm is any abnormal contraction or twitch of the eyelid. In most cases, symptoms last for a few days then disappear without treatment, but sometimes the twitching is chronic and persistent, causing lifelong challenges. In those rare cases, the symptoms are often severe enough to result in functional blindness. The person's eyelids feel like they are clamping shut and will not open without great effort. People have normal eyes, but for periods of time are effectively blind due to their inability to open their eyelids. In contrast, the reflex blepharospasm is due to any pain in and around the eye. It is of two types: essential and reflex blepharospasm. The benign essential blepharospasm is a focal dystonia—a neurological movement disorder involving involuntary and sustained contractions of the muscles around the eyes. The term essential indicates that the cause is unknown, but fatigue, stress, or an irritant are possible contributing factors. Symptoms include: Excessive blinking and spasming of the eyes, usually characterized by uncontrollable eyelid closure of durations longer than the typical blink reflex, sometimes lasting minutes or even hours. Uncontrollable contractions or twitches of the eye muscles and surrounding facial area. Some sufferers have twitching symptoms that radiate into the nose, face and sometimes, the neck area. Dryness of the eyes. Sensitivity to the sun and bright light.

* Bloom syndrome is an inherited disorder characterized by short stature, a skin rash that develops after exposure to the sun, and a greatly increased risk of cancer. People with Bloom syndrome are usually smaller than 97 percent of the population in both height and weight from birth, and they rarely exceed 5 feet tall in adulthood. Affected individuals have skin that is sensitive to sun exposure, and they usually develop a butterfly-shaped patch of reddened skin across the nose and cheeks. A skin rash can also appear on other areas that are typically exposed to the sun, such as the back of the hands and the forearms. Small clusters of enlarged blood vessels (telangiectases) often appear in the rash; telangiectases can also occur in the eyes. Other skin features include patches of skin that are lighter or darker than the surrounding areas (hypopigmentation or hyperpigmentation respectively). These patches appear on areas of the skin that are not exposed to the sun, and their development is not related to the rashes. People with Bloom syndrome have an increased risk of cancer. They can develop any type of cancer, but the cancers arise earlier in life than they do in the general population, and affected individuals often develop more than one type of cancer. Individuals with Bloom syndrome have a high-pitched voice and distinctive facial features including a long, narrow face; a small lower jaw; and prominent nose and ears. Other features can include learning disabilities, an increased risk of diabetes, chronic obstructive pulmonary disease (COPD), and mild immune system abnormalities leading to recurrent infections of the upper respiratory tract, ears, and lungs during infancy. Men with Bloom syndrome usually do not produce sperm and as a result are unable to father children (infertile). Women with the disorder generally have reduced fertility and experience menopause at an earlier age than usual.

* Bowen’s disease is also known as intraepidermal squamous cell carcinoma, and is a growth of cancerous cells that is confined to the outer layer of the skin. It is not a serious condition, and its importance rests on the fact that, occasionally, it can progress into an invasive skin cancer (squamous cell carcinoma). Most cases of Bowen’s disease

develop as a result of long-term sun exposure. Very occasionally, Bowen’s disease may be seen in the context of previous radiotherapy, following chronic arsenic ingestion (very rare nowadays) or on the genitalia in association with the virus that causes warts (the human papillomavirus). Bowen's disease is neither infectious, nor due to an allergy. Often there are no symptoms, although the surface crusting may catch on clothing. A patch of Bowen’s disease starts as a small red scaly area, which grows very slowly. It may reach a diameter of a few centimetres across. It commonly occurs on sun-exposed skin, especially the head, hands and lower legs. More than one lesion may be present. The development of an ulcer or lump on a patch of Bowen’s disease may indicate the formation of invasive squamous cell carcinoma.

* Burkholderia is a genus of Proteobacteria whose pathogenic members include Burkholderia mallei, responsible for glanders, a disease that occurs mostly in horses and related animals; Burkholderia pseudomallei, causative agent of melioidosis; and Burkholderia cepacia, an important pathogen of pulmonary infections in people with cystic fibrosis (CF). Due to their antibiotic resistance and the high mortality rate from their associated diseases, B. mallei and B. pseudomallei are considered to be potential biological warfare agents, targeting livestock and humans.

* Chondrosarcoma is a cancer composed of cells derived from transformed cells that produce cartilage. Chondrosarcoma is a member of a category of tumors of bone and soft tissue known as sarcomas. About 30% of skeletal system cancers are chondrosarcomas. It is resistant to chemotherapy and radiotherapy. Unlike other primary bone cancers that mainly affect children and adolescents, chondrosarcoma can present at any age. It more often affects the axial skeleton than the appendicular skeleton. The most common sites for chondrosarcoma to grow are the pelvis and shoulder, along with the superior metaphyseal and diaphyseal regions of the arms and legs. However, chondrosarcoma may occur in any bone, and are sometimes found in the skull, particularly at its base. Some symptoms are: Back or thigh pain, Sciatica, Bladder Symptoms, Unilateral edema. The cause is unknown. Patients may have a history of enchondroma or osteochondroma. A small minority of secondary chondrosarcomas occur in patients with Maffucci syndrome and Ollier disease. It has been associated with faulty isocitrate dehydrogenase 1 and 2 enzymes, which are also associated with gliomas and leukemias.

* Coxsackievirus is a virus that belongs to a family of nonenveloped, linear, positive-sense single-stranded RNA viruses, Picornaviridae and the genus Enterovirus, which also includes poliovirus and echovirus. Enteroviruses are among the most common and important human pathogens, and ordinarily its members are transmitted by the fecal-oral route. Coxsackieviruses share many characteristics with poliovirus. Coxsackieviruses are among the leading causes of aseptic meningitis (the other usual suspects being echovirus and mumps virus). Coxsackieviruses are divided into group A and group B viruses based on early observations of their pathogenicity in neonatal mice. In general, group A coxsackieviruses tend to infect the skin and mucous membranes, causing herpangina, acute hemorrhagic conjunctivitis, and hand, foot, and mouth (HFM) disease. Both group A and group B coxsackieviruses can cause

nonspecific febrile illnesses, rashes, upper respiratory tract disease, and aseptic meningitis. Group B coxsackieviruses tend to infect the heart, pleura, pancreas, and liver, causing pleurodynia, myocarditis, pericarditis, and hepatitis (inflammation of the liver not related to the hepatotropic viruses). Coxsackie B infection of the heart can lead to pericardial effusion.

* Creeping eruption or Cutaneous larva migrans is a parasitic skin infection caused by hookworm larvae that usually infest cats, dogs and other animals. Humans can be infected with the larvae by walking barefoot on sandy beaches or contacting moist soft soil that have been contaminated with animal faeces. Many types of hookworm can cause cutaneous larva migrans. Common causes are: Ankylostoma braziliense: hookworm of wild and domestic dogs and cats found in central and southern US, Central and South America, and the Caribbean. Ankylostoma caninum: dog hookworm found in Australia. Uncinaria stenocephala: dog hookworm found in Europe. Bunostomum phlebotomum: cattle hookworm. A non-specific eruption occurs at the site of penetration of the hookworm larvae. There may be a tingling or prickling sensation within 30 minutes of the larvae penetrating. The larvae can then either lie dormant for weeks or months or immediately begin creeping activity that create 2-3mm wide, snakelike tracks stretching 3-4cm from the penetration site. These are slightly raised, flesh-coloured or pink and cause intense itching. Tracks advance a few millimetres to a few centimetres daily and if many larvae are involved a disorganised series of loops and tortuous tracks may form. Sites most commonly affected by cutaneous larva migrans are the feet, spaces between the toes, hands, knees and buttocks.

* Currarino syndrome refers to failure of formation of all or part of the sacrum (the lowest section of the spine). Currarino syndrome is a condition characterized by the combination of: Partial absence of the sacrum (the lowest portion of spine), Anorectal (anal and rectal) abnormalities, and An abnormal mass in front of the sacrum (due to a meningocoele or teratoma). The malformations in Currarino syndrome are all in tissues that have their embryological origin in the tail bud and may reflect disturbances in its formation during early embryonic life. A mutation (change) in a gene called the HLXB9 homeobox gene has been identified as responsible for autosomal dominant Currarino syndrome, also known as hereditary sacral agenesis.

* Cystinosis is a condition characterized by accumulation of the amino acid cystine (a building block of proteins) within cells. Excess cystine damages cells and often forms crystals that can build up and cause problems in many organs and tissues. The kidneys and eyes are especially vulnerable to damage; the muscles, thyroid, pancreas, and testes may also be affected. There are three distinct types of cystinosis. In order of decreasing severity, they are nephropathic cystinosis, intermediate cystinosis, and non-nephropathic or ocular cystinosis. Infants affected by nephropathic cystinosis initially exhibit poor growth and particular kidney problems (sometimes called renal Fanconi syndrome). The kidney problems lead to the loss of important minerals, salts, fluids, and other nutrients. The loss of nutrients not only impairs growth, but may result in soft, bowed bones (hypophosphatemic rickets), especially in the legs. The nutrient imbalances in the body lead to increased urination, thirst, dehydration, and abnormally

acidic blood (acidosis). By about age two, cystine crystals may also be present in the cornea. The buildup of these crystals in the eye causes an increased sensitivity to light (photophobia). Without treatment, children with cystinosis are likely to experience complete kidney failure by about age ten. Other signs and symptoms that may occur in untreated patients include muscle deterioration, blindness, inability to swallow, impaired sweating, decreased hair and skin pigmentation, diabetes, and thyroid and nervous system problems. The signs and symptoms of intermediate cystinosis are the same as nephropathic cystinosis, but they occur at a later age. People with non-nephropathic or ocular cystinosis do not usually experience growth impairment or kidney malfunction. The only symptom is photophobia due to cystine crystals in the cornea.

* Dientamoebiasis is a medical condition caused by infection with Dientamoeba fragilis. Dientamoeba fragilis is a single celled parasite that infects the lower gastrointestinal tract of humans. As many individuals are asymptomatic carriers of D. fragilis, pathogenic and nonpathogenic variants are proposed to exist. It increases in conditions of crowding and poor sanitation. An Australian study identified a large number of patients, considered to have irritable bowel syndrome, who were actually infected with Dientamoeba fragilis. Although D. fragilis has been described as an infection "emerging from obscurity", it has become one of the most prevalent gastrointestinal infections in industrialized countries, especially among children and young adults. A Canadian study reported a prevalence of around 10% in boys and girls aged 11–15 years, a prevalence of 11.5% in individuals aged 16–20, and a lower incidence of 0.3–1.9% in individuals over age 20. The most commonly reported symptoms in conjunction with infection with D. fragilis include abdominal pain (69%) and diarrhea (61%). Diarrhea may be intermittent and may not be present in all cases. It is often chronic, lasting over two weeks. The degree of symptoms may vary from asymptomatic to severe, and can include weight loss, vomiting, fever, and involvement of other digestive organs.

* Dystrophia brevicollis congenita or Klippel-Feil syndrome, is a bone disorder characterized by the abnormal joining (fusion) of two or more spinal bones in the neck (cervical vertebrae). The vertebral fusion is present from birth. Three major features result from this vertebral fusion: a short neck, the resulting appearance of a low hairline at the back of the head, and a limited range of motion in the neck. Most affected people have one or two of these characteristic features. Less than half of all individuals with Klippel-Feil syndrome have all three classic features of this condition. In people with Klippel-Feil syndrome, the fused vertebrae can limit the range of movement of the neck and back as well as lead to chronic headaches and muscle pain in the neck and back that range in severity. People with Klippel-Feil syndrome may have a wide variety of other features in addition to their spine abnormalities. In some cases, Klippel-Feil syndrome occurs as a feature of another disorder or syndrome, such as Wildervanck syndrome or hemifacial microsomia. In these instances, affected individuals have the signs and symptoms of both Klippel-Feil syndrome and the additional disorder.

* Echinococcosis is an infection caused by either the Echinococcus granulosus or Echinococcus multilocularis tapeworm. The infection is also called hydatid disease. Humans become infected when they swallow the tapeworm eggs in contaminated food.

The eggs then form cysts inside the body. A cyst is a closed pocket or pouch. The cysts keep growing, which leads to symptoms. E granulosus is an infection caused by tapeworms found in dogs, and livestock such as sheep, pigs, goats, and cattle. These tapeworms are around 2 to 7 mm long. The infection is called cystic echinococcosis (CE). It leads to growth of cysts mainly in the lungs and liver. Cysts can also be found in the heart, bones, and brain. E multilocularis is the infection caused by tapeworms found in dogs, cats, rodents, and foxes. These tapeworms are around 1 to 4 mm long. The infection is called alveolar echinococcosis (AE). It is a life-threatening condition because tumor-like growths form in the liver. Other organs, such as the lungs and brain can be affected. Children or young adults are more prone to get the infection. Cysts may produce no symptoms for 10 years or more. As the disease advances and the cysts get larger, symptoms may include: Pain in the upper right part of the abdomen (liver cyst). Increase in size of the abdomen due to swelling (liver cyst). Bloody sputum (lung cyst). Chest pain (lung cyst). Cough (lung cyst). Severe allergic reaction (anaphylaxis) when cysts break open.

* Fibrous dysplasia polyostotic, also known as McCune-Albright syndrome is a disorder that features the replacement of multiple areas of bone by fibrous tissue, which may cause fractures and deformity of the legs, arms, and skull. McCune-Albright's syndrome is a genetic disorder that is characterized by polyostotic fibrous dysplasia along with skin pigmentation and hormonal problems, with premature sexual development. The flat areas of increased skin pigment are called cafe au lait spots. The hormonal problems that can be related to polyostotic fibrous dysplasia include early puberty (with premature menstrual bleeding and development of breasts and pubic hair), thyroid abnormalities, and an increased rate of growth.

* Fibrous dysplasia of bone is a skeletal disorder in which bone-forming cells fail to mature and produce too much fibrous, or connective, tissue. Areas of healthy bone are replaced with this fibrous tissue. The replacement of normal bone in fibrous dysplasia can lead to pain, misshapen bones, and fracture, especially when it occurs in the long bones (arms and legs). When it occurs in the skull, there can also be a replacement of the normal bone with fibrous tissue, resulting in changes in the shape of the face or skull, pain, and, in rare circumstances, hearing or vision loss. Some people with fibrous dysplasia have only one bone involved (monostotic), whereas other people have more than one bone involved (polyostotic). The disease may occur alone, or as part of a condition known as the McCune-Albright syndrome. Fibrous dysplasia can affect any bone in the body. The most common sites are the bones in the skull and face, femur (thighbone), tibia (shinbone), humerus (upper arm), pelvis, and ribs. Although many bones can be affected at once—and affected bones are often found on one side of the body—the disease does not “spread” from one bone to another; that is, the pattern of which bones are involved is established very early in life and does not change with age.

* Giant lymph node hyperplasia (also known as Castleman's disease or CD) is a rare, benign disease involving lymph nodes in different locations, predominantly in the mediastinum. This disorder is marked by non-cancerous growths (tumors) that may develop in the lymph node tissue at a single site or throughout the body. It involves

hyperproliferation of certain B cells that typically produce cytokines. The most common 'B Symptoms' of of Castleman's disease are high fevers, anemia, weight loss, loss of appetite, and low white blood cell counts, which may to be due to the overproduction of interleukin 6. Symptomatically, therefore, this disease can be difficult to diagnose and even in the case of a lymph-node biopsy a conclusive diagnosis remains problematic. The exact cause of Castleman's Disease is not known, though some researchers speculate that increased production of interleukin-6 (IL-6) may be involved in the development of Castleman's Disease.

* Gilbert disease is a relatively mild condition characterized by periods of elevated levels of a toxic substance called bilirubin in the blood (hyperbilirubinemia). Bilirubin, which has an orange-yellow tint, is produced when red blood cells are broken down. This substance is removed from the body only after it undergoes a chemical reaction in the liver, which converts the toxic form of bilirubin (unconjugated bilirubin) to a nontoxic form called conjugated bilirubin. People with Gilbert disease have a buildup of unconjugated bilirubin in their blood (unconjugated hyperbilirubinemia). In affected individuals, bilirubin levels fluctuate and very rarely increase to levels that cause jaundice, which is yellowing of the skin and whites of the eyes. Gilbert disease is usually recognized in adolescence. If people with this condition have episodes of hyperbilirubinemia, these episodes are generally mild and typically occur when the body is under stress, for instance because of dehydration, prolonged periods without food (fasting), illness, vigorous exercise, or menstruation. Some people with Gilbert syndrome also experience abdominal discomfort or tiredness. However, approximately 30 percent of people with Gilbert syndrome have no signs or symptoms of the condition.

* Glycogenosis or Glycogen storage disorder, are a group of inherited diseases. They result from a problem with one of the proteins (known as enzymes) involved in the conversion of glucose to glycogen, or the breakdown of glycogen back into glucose. They mostly tend to affect the liver and muscles. Most are diagnosed in childhood. Symptoms include weakness, tiredness and low blood sugar levels. Because there are a number of different enzymes involved in glycogen production and breakdown, there are a number of different glycogenosis. Glycogen storage disorders are rare. It is estimated that about one baby in every 20,000 to 40,000 babies born has a glycogen storage disorder.

* Holmes–Adie syndrome or Adie's tonic pupil, is a neurological disorder characterized by a tonically dilated pupil that reacts slowly to light but shows a more definite response to accommodation (i.e., light-near dissociation). It is frequently seen in females with absent knee or ankle jerks and impaired sweating. It is caused by damage to the postganglionic fibers of the parasympathethethetic innervation of the eye, usually by a viral or bacterial infection which causes inflammation, and affects the pupil of the eye and the autonomic nervous system. Adie syndrome presents with three hallmark symptoms, namely at least one abnormally dilated pupil (mydriasis) which does not constrict in response to light, loss of deep tendon reflexes, and abnormalities of sweating. Other signs may include hyperopia due to accommodative paresis, photophobia and difficulty reading. Pupillary symptoms of Holmes–Adie syndrome are

thought to be the result of a viral or bacterial infection that causes inflammation and damage to neurons in the ciliary ganglion, located in the posterior orbit, that provides parasympathetic control of eye constriction. Additionally, patients with Holmes-Adie Syndrome can also experience problems with autonomic control of the body. This second set of symptoms is caused by damage to the dorsal root ganglia of the spinal cord.

* Hypoplastic left heart syndrome is a medical condition that involves the under-development of the structures of the left side of the heart. The degree of under-development can vary from baby to baby but the structures involved usually include the following: The left ventricle —This is the large lower left-hand chamber of the heart that pumps oxygen-rich blood out to the body. In this syndrome, this chamber is very small and poorly developed, and therefore is unable to provide enough blood flow to meet the body’s needs. The mitral and aortic valves —The mitral valve is the valve that controls the amount of blood that flows from the left atrium (the upper left-hand chamber of the heart) into the left ventricle. The aortic valve is the valve between the left ventricle and the aorta. In this syndrome, the valves can be narrowed or closed, hindering the flow of oxygenated blood out to the body. The aorta —This is the largest artery in the body. It receives the oxygenated blood from the left ventricle and distributes it to the body. In this syndrome, the aorta is small and very narrowed, which can block the flow of oxygenated blood out of the heart and to the body. Hypoplastic left heart syndrome occurs in four to 16 out of every 10,000 live births, and accounts for about 8 percent of congenital heart disease in babies. Under-development of the heart structures occurs during the first eight weeks of pregnancy. There is often no clear reason for the development of congenital heart defects. In some cases, there might be a genetic link or an environmental exposure that makes the defects occur more often in some families. In other cases, there is simply no known cause. Hypoplastic left heart syndrome occurs more often (55 percent to 70 percent) in males than females. Babies with this syndrome tend to also have other cardiovascular and neurologic organ defects. Hypoplastic left heart syndrome can be detected while the baby is still in the uterus (see next question). However, once born, symptoms usually appear within a few days after birth. Symptoms, which might vary from baby to baby, include: Pale skin color, Blue hue to skin, lips, and nailbeds (called cyanosis) Difficulty breathing, Difficulty feeding, Rapid heart beat, Sweaty, clammy, or cool skin.

* Kuru is a very rare disease. It is caused by an infectious protein found in contaminated human brain tissue. Kuru is found among people from New Guinea who practiced a form of cannibalism in which they ate the brains of dead people as part of a funeral ritual. This practice stopped in 1960, but cases of kuru were reported for many years afterward because the disease has a long incubation period. The incubation period is the time it takes for symptoms to appear after being exposed to the agent that causes disease. Kuru causes brain and nervous system changes similar to Creutzfeldt-Jakob disease. Similar diseases appear in cows as bovine spongiform encephalopathy (BSE), also called mad cow disease. The main risk factor for kuru is eating human brain tissue, which can contain the infectious particles. Symptoms of kuru include: Arm and leg pain. Coordination problems that become severe. Difficulty walking. Headache. Swallowing

difficulty. Tremors and muscle jerks. Difficulty swallowing and being unable to feed oneself can lead to malnutrition or starvation. The average incubation period is 10 to 13 years, but incubation periods of 50 years or even longer have been reported.

* Lipodystrophy intestinal, or Whipple's disease, is a rare systemic infectious disease caused by the bacterium Tropheryma whipplei. Whipple's disease primarily causes malabsorption but may affect any part of the body including the heart, brain, joints, skin, lungs and the eyes.Whipple’s disease interferes with normal digestion by impairing the breakdown of foods, such as fats and carbohydrates, and hampering the body’s ability to absorb nutrients. Symptoms tend to develop slowly over a period of many years in most people with this disease. In some cases, some symptoms, such as joint pain and weight loss, develop years before the gastrointestinal symptoms. Gastrointestinal signs and symptoms are common in Whipple’s disease and may include: Diarrhea, Abdominal cramping and pain, which may worsen after meals, Weight loss, associated with the malabsorption of nutrients. Other frequent signs and symptoms associated with Whipple’s disease include: Inflamed joints, particularly your ankles, knees and wrists, Fatigue, Weakness, Anemia. In some cases, signs and symptoms of Whipple’s disease may include: Fever, Cough, Enlarged lymph nodes, Skin darkening (hyperpigmentation) in areas exposed to the sun and in scars, Chest pain, Enlarged spleen. Neurological signs and symptoms may include: Difficulty walking, Visual impairment, including lack of control of eye movements, Seizures, Confusion, Memory loss. The presentation can be highly variable and approximately 15% of patients do not have the classic signs and symptoms. Whipple's disease is significantly more common in men, with 87% of the patients being male.

* Lymphogranuloma venereum (LGV) is an uncommon sexually transmitted disease (STD) caused by Chlamydia trachomatis. LGV is endemic in certain areas of Africa, Southeast Asia, India, the Caribbean, and South America. It is rare in industrialized countries, but in the last 10 years has been increasingly recognized in North America, Europe, and the United Kingdom as causing outbreaks of proctitis among men who have sex with men (MSM). LGV is a subtype of genital ulcer diseases that include other STDs, such as HSV-2, syphilis, and chancroid. This condition is characterized by self-limited genital papules or ulcers followed by painful inguinal and/or femoral lymphadenopathy, which may be the only clinical manifestation at presentation. Patients with LGV may also present with rectal ulcerations and symptoms of proctocolitis, especially among patients participating in receptive anal intercourse. In these cases, rectal pain, discharge, and bleeding may be confused with other GI conditions such as colitis. If left untreated, disfiguring ulceration and enlargement of the external genitalia, and subsequent lymphatic obstruction, may occur.

* Microvascular angina, or chest pain, may be a symptom of coronary microvascular disease (MVD). Coronary MVD is heart disease that affects the heart’s smallest coronary artery blood vessels. Spasms within the walls of these very small arterial blood vessels causes reduced blood flow to the heart muscle leading to a type of chest pain referred to as microvascular angina. Angina that occurs in coronary MVD may differ from the typical angina that occurs in heart disease in that the chest pain usually lasts

longer than 10 minutes, and it can last longer than 30 minutes. The pain or discomfort: May be more severe and last longer than other types of angina pain, May occur with shortness of breath, sleep problems, fatigue, and lack of energy, Often is first noticed during routine daily activities and times of mental stress. Microvascular angina is much more common in women (typically, postmenopausal women) than in men.

* Neuroleptic malignant syndrome is a life-threatening, neurological disorder most often caused by an adverse reaction to neuroleptic or antipsychotic drugs. Symptoms include high fever, sweating, unstable blood pressure, stupor, muscular rigidity, and autonomic dysfunction. In most cases, the disorder develops within the first 2 weeks of treatment with the drug; however, the disorder may develop any time during the therapy period. The syndrome can also occur in people taking anti-Parkinsonism drugs known as dopaminergics if those drugs are discontinued abruptly.

* Olivopontocerebellar atrophy (OPCA) is the degeneration of neurons in specific areas of the brain – the cerebellum, pons, and inferior olives. OPCA is present in several neurodegenerative syndromes, including inherited and non-inherited forms of ataxia (such as the hereditary spinocerebellar ataxia known as Machado–Joseph disease) and multiple system atrophy (MSA), with which it is primarily associated. OPCA may also be found in the brains of individuals with prion disorders and inherited metabolic diseases. OPCA is characterized by progressive cerebellar ataxia, leading to clumsiness in body movements, veering from midline when walking, wide-based stance, and falls without signs of paralysis or weakness. Clinical presentation can vary greatly between patients, but mostly affects speech, balance and walking. Other possible neurological problems include spasmodic dysphonia, hypertonia, hyperreflexia, rigidity, dysarthria, dysphagia and neck dystonic posture.

* Paralysis bulbar is an acute or chronic disease of middle age, due to involvement of the motor nuclei of the medulla oblongata, and characterized by paralysis of the lips, tongue, larynx, and pharynx, resulting in impairment of speech, phonation, mastication, and deglutition. Paralysis bulbar is more frequent in men than in women. It may be due to hemorrhage, embolism or softening, exposure to cold, trauma, or diphtheria. Lead-poisoning and syphilis have also been named as possible causes. Muscular atrophy is limited to the lips, tongue, palate, and muscles of the larynx, and if spinal atrophy be associated, the muscles of the neck, shoulders, or arms are involved in the process. The acute form symptoms is the onset is sudden, and may be attended by nausea and vomiting. The symptoms of the chronic form are very gradual in their development, the first noticeable feature being a difficulty in controlling the tongue and articulating sounds that depend upon it. As the disease progresses, the paralysis of the tongue becomes more pronounced; it can not be protruded, and lies on the floor of the mouth. Death usually results from exhaustion, inanition, choking, inspiration pneumonia, or circulatory disturbances.

* Paroxysmal hemoglobinuria is a condition characterized by the recurrence of hemoglobinuria, the presence of free hemoglobin in the urine, which may make the urine look dark, caused by intravascular hemolysis, the rupture of erythrocytes with

release of hemoglobin into the plasma. In cases occurring upon cold exposure (paroxysmal cold hemoglobinuria), usually after infections, there is a circulating antibody which is also a cold hemolysin. In cases occurring during or after sleep (paroxysmal nocturnal hemoglobinuria), the clonal hematopoietic stem cells exhibit a global deficiency of cell membrane proteins.

* Perineurial cysts, also known as Tarlov cysts, are type II innervated meningeal cysts, cerebrospinal-fluid-filled (CSF) sacs most frequently located in the spinal canal of the S1-to-S5 region of the spinal cord (much less often in the cervical, thoracic or lumbar spine), and can be distinguished from other meningeal cysts by their nerve-fiber-filled walls. Tarlov cysts are defined as cysts formed within the nerve-root sheath at the dorsal root ganglion. Since Tarlov cysts are cysts of the spinal meninges, symptomatic Tarlov cysts by definition cause myelopathy. Common symptoms specific to sacral Tarlov cysts are: Back pain, perineal pain, secondary Sciatica, secondary piriformis muscle dysfunction with tertiary sciatica, Cauda equina syndrome, neurogenic claudication (pain caused by walking), neurogenic bladder, dysuria, urinary incontinence, coccygodynia, sacral radiculopathy, radicular pain, headaches, retrograde ejaculation, paresthesia, hypesthesia, secondary pelvic floor dysfunction, vaginismus, motor disorders in lower limbs and the genital, perineal, or lumbosacral areas, sacral or buttocks pain, vaginal or penile paraesthesia, sensory changes over buttocks, perineal area, and lower extremity; difficulty walking; severe lower abdominal pain, bowel dysfunction, intestinal motility disorders like constipation or bowel incontinence.

* Pityriasis refers to any of various skin diseases of humans and animals, characterized by epidermal shedding of flaky scales.

* Poland syndrome is a disorder in which affected individuals are born with missing or underdeveloped muscles on one side of the body, resulting in abnormalities that can affect the chest, shoulder, arm, and hand. The extent and severity of the abnormalities vary among affected individuals. Mild cases of Poland syndrome without hand involvement may not be evident until puberty, when the differences (asymmetry) between the two sides of the chest become more apparent. By contrast, severely affected individuals have abnormalities of the chest, hand, or both that are apparent at birth. In rare cases, severely affected individuals have abnormalities of internal organs such as a lung or a kidney, or the heart is abnormally located in the right side of the chest (dextrocardia). Rarely, chest and hand abnormalities resembling those of Poland syndrome occur on both sides of the body, but researchers disagree as to whether this condition is a variant of Poland syndrome or a different disorder.

* Progressive intracranial occlusive arteriopathy or Moyamoya disease is a disease in which certain arteries in the brain are constricted. Blood flow is blocked by the constriction, and also by blood clots (thrombosis). A collateral circulation develops around the blocked vessels to compensate for the blockage, but the collateral vessels are small, weak, and prone to bleeding, aneurysm and thrombosis. Moyamoya disease can be either congenital or acquired. Patients with Down syndrome, sickle cell anemia, neurofibromatosis type 1, congenital heart disease, fibromuscular dysplasia, activated

protein C resistance, or head trauma can develop moyamoya malformations. It is more common in women than in men, although about a third of those affected are male. Once it begins, the vascular occlusion tends to continue despite any known medical management. In some people this leads to transient ischemic attacks or repeated strokes with severe functional impairment or even death. In others, the blockage may not cause any symptoms. The disease causes constrictions primarily in the internal carotid artery, and often extends to the middle and anterior cerebral arteries, branches of the internal carotid artery inside the skull. When the internal carotid artery becomes completely blocked, the fine collateral circulation that it supplies is obliterated. Patients often survive on the collateral circulation from the back (posterior) of the circle of Willis, arising from the basilar artery. The arterial constrictions in moyamoya disease are unlike the constrictions in atherosclerosis. In atherosclerosis, the walls of arteries are damaged, leading to the deposition of fat and immune cells, and ultimately the accumulation of immune cells laden with fat. In moyamoya, the inner layer of the carotid artery proliferates within the arterial lumen. The artery also fills with blood clots, which may cause strokes. The clinical features are strokes, recurrent transient ischemic attacks (TIAs), sensorimotor paralysis (numbness and paralysis of the extremities), convulsions and/or migraine-like headaches. Moreover, following a stroke, secondary bleeding may occur. Such bleeding, called hemorrhagic strokes, may also stem from rupture of the weak neovascular vessel walls.

* Proteus syndrome is a rare condition characterized by overgrowth of the bones, skin, and other tissues. Organs and tissues affected by the disease grow out of proportion to the rest of the body. The overgrowth is usually asymmetric, which means it affects the right and left sides of the body differently. Newborns with Proteus syndrome have few or no signs of the condition. Overgrowth becomes apparent between the ages of 6 and 18 months and gets more severe with age. In people with Proteus syndrome, the pattern of overgrowth varies greatly but can affect almost any part of the body. Bones in the limbs, skull, and spine are often affected. The condition can also cause a variety of skin growths. Blood vessels (vascular tissue) and fat (adipose tissue) can also grow abnormally in Proteus syndrome. Some people with Proteus syndrome have neurological abnormalities, including intellectual disability, seizures, and vision loss. Other potential complications of Proteus syndrome include an increased risk of developing various types of noncancerous (benign) tumors and a type of blood clot called a deep venous thrombosis (DVT). DVTs occur most often in the deep veins of the legs or arms. If these clots travel through the bloodstream, they can lodge in the lungs and cause a life-threatening complication called a pulmonary embolism. Pulmonary embolism is a common cause of death in people with Proteus syndrome.

* Pseudomonas infection refers to a disease caused by one of the species of the genus Pseudomonas. "Pseudomonas sp. KUMS3" could be considered as an opportunistic pathogen, which can survive on the fish surface or in water or in the gut and may cause disease when unfavorable conditions develop. P. aeruginosa is an opportunistic human pathogen, most commonly affecting immunocompromised patients, such as those with cystic fibrosis or AIDS. Infection can affect many different parts of the body, but infections typically target the respiratory tract (e.g. patients with CF or those on

mechanical ventilation), causing bacterial pneumonia. In a surveillance study between 1986 and 1989, P. aeruginosa was the third leading cause of all nosocomial infections, and specifically the number one leading cause of hospital-acquired pneumonia and third leading cause of hospital-acquired UTI. P. oryzihabitans can also be a human pathogen, although infections are rare. It can cause peritonitis, endophthalmitis, septicemia and bacteremia. Similar symptoms although also very rare can be seen by infections of P. luteola. P. plecoglossicida and P. anguilliseptica are fish pathogenic species. Due to their hemolytic activity, even non-pathogenic species of Pseudomonas can occasionally become a problem in clinical settings, where they have been known to infect blood transfusions.

* Quadriplegia, is paralysis caused by illness or injury that results in the partial or total loss of use of all four limbs and torso; paraplegia is similar but does not affect the arms. The loss is usually sensory and motor, which means that both sensation and control are lost. Tetraparesis or quadriparesis, on the other hand, means muscle weakness affecting all four limbs. Although the most obvious symptom is impairment to the limbs, functioning is also impaired in the torso. This can mean a loss or impairment in controlling bowel and bladder, sexual function, digestion, breathing and other autonomic functions. Furthermore, sensation is usually impaired in affected areas. This can manifest as numbness, reduced sensation or burning neuropathic pain. Secondarily, because of their depressed functioning and immobility, people with tetraplegia are often more vulnerable to pressure sores, osteoporosis and fractures, frozen joints, spasticity, respiratory complications and infections, autonomic dysreflexia, deep vein thrombosis, and cardiovascular disease. Severity depends on both the level at which the spinal cord is injured and the extent of the injury. Tetraplegia is caused by damage to the brain or the spinal cord at a high level in particular, spinal cord injuries secondary to an injury to the cervical spine. Typical causes of this damage are trauma (such as a traffic collision, diving into shallow water, a fall, a sports injury), disease (such as transverse myelitis, multiple sclerosis, or polio), or congenital disorders (such as muscular dystrophy). It is possible to suffer a broken neck without becoming tetraplegic if the vertebrae are fractured or dislocated but the spinal cord is not damaged. Conversely, it is possible to injure the spinal cord without breaking the spine, for example when a ruptured disc or bone spur on the vertebra protrudes into the spinal column.

* Rat-bite fever is an acute, febrile human illness caused by bacteria transmitted by rodents, rats, or mice, in most cases, which is passed from rodent to human by the rodent's urine or mucous secretions. It is a rare disease spread by infected rodents and can be caused by two specific types of bacteria. Some cases are diagnosed after patients were exposed to the urine or bodily secretions of an infected animal. These secretions can come from the mouth, nose, or eyes of the rodent. The majority of cases are due to the animal's bite. It can also be transmitted throughout food or water contaminated with rat feces or urine. Household pets such as dogs or cats exposed to these animals can also carry the disease and infect humans. Symptoms are different for every person depending on the type of rat-bite fever with which the person is infected. Both types of rat-bite fever, spirillary and streptobacillary, have a few individual symptoms, although most symptoms are shared. Rat-bite symptoms are visually seen in

most cases and include inflammation around the open sore. A rash can also spread around the area and appear red or purple. Other symptoms associated with streptobacillary rat-bite fever include chills, fever, vomiting, headaches, and muscle aches. Joints can also become painfully swollen and pain can be experienced in the back. Skin irritations such as ulcers or inflammation can develop on the hands and feet. Wounds heal slowly, so symptoms possibly come and go over the course of a few months. Symptoms associated with spirillary rat-bite fever include issues with the lymph nodes, which often swell or become inflamed as a reaction to the infection. The most common locations of lymph node swelling are in the neck, groin, and underarm. Symptoms generally appear within 2 to 10 days of exposure to the infected animal. It begins with the fever and progresses to the rash on the hands and feet within 2 to 4 days. Rash appears all over the body with this form, but rarely causes joint pain.

* Retinoschisis is a condition in which an area of the retina (the tissue lining the inside of the back of the eye that transmits visual signals to the optic nerve and brain) has separated into two layers. The part of the retina that is affected by retinoschisis will have suboptimal vision. This can occur in different layers of the retina, and for different reasons. The two major causes of retinoschisis are: Juvenile X-linked Retinoschisis, a genetic disease of the retina and affects primarily boys and young men. This condition typically presents during childhood and is estimated to affect one in 5,000 to 25,000 individuals. Degenerative retinoschisis is the splitting of the retina as a result of aging. It can affect men and women. Symptos are: Decreased central vision, Decreased peripheral vision.

* Rubinstein-Taybi syndrome is a condition characterized by short stature, moderate to severe intellectual disability, distinctive facial features, and broad thumbs and first toes. Additional features of the disorder can include eye abnormalities, heart and kidney defects, dental problems, and obesity. These signs and symptoms vary among affected individuals. People with this condition have an increased risk of developing noncancerous and cancerous tumors, including certain kinds of brain tumors. Cancer of blood-forming tissue (leukemia) also occurs more frequently in people with Rubinstein-Taybi syndrome. Rarely, Rubinstein-Taybi syndrome can involve serious complications such as a failure to gain weight and grow at the expected rate (failure to thrive) and life-threatening infections. Infants born with this severe form of the disorder usually survive only into early childhood.

* Sarcoma osteogenic (osteosarcoma) is a cancer that starts in the bone. It often starts in the ends of the bones where new bone tissue forms as a young person grows. Bones in the thigh, upper arm, and shin are the most common sites, but osteosarcoma can occur anywhere in the body. It usually develops during the period of rapid growth during adolescence, as a teenager matures into an adult. Osteosarcoma is the most common malignant bone tumor in youth. The average age at diagnosis is 15 years. Boys and girls have a similar incidence of this tumor until late adolescence, at which time boys are more commonly affected. The cause of osteosarcoma is unknown. Only rarely does osteosarcoma run in families. A defective tumor suppressor gene, allowing tumors to grow, has been linked to increased risk of this disease and is also associated with

familial retinoblastoma, a childhood cancer of the eye. Children with familial retinoblastoma have a high risk for osteosarcoma in adolescence. Pain in the affected bone is the most common symptom. This pain may initially come and go and then gradually become more severe and constant. As the tumor grows, there may be visible swelling and limitation of motion. Tumors in the legs cause limping, while those in the arms cause pain on lifting. Swelling over the tumor may be warm and slightly reddened. Sometimes, the first sign may be a bone fracture. The tumor may cause weakness in the affected area of the bone. A fracture at the site of the tumor is called a “pathological fracture,” which occurs after what often seems like a routine movement.

* Sclerosis hereditary spinal or Friedreich's ataxia is an autosomal recessive inherited disease that causes progressive damage to the nervous system. It manifests in initial symptoms of poor coordination such as gait disturbance; it can also lead to scoliosis, heart disease and diabetes, but does not affect cognitive function. The disease is progressive, and ultimately a wheelchair is required for mobility. Its incidence in the general population is roughly 1 in 50,000. The particular genetic mutation (expansion of an intronic GAA triplet repeat in the FXN gene) leads to reduced expression of the mitochondrial protein frataxin. Over time this deficiency causes the aforementioned damage, as well as frequent fatigue due to effects on cellular metabolism. The ataxia of Friedreich's ataxia results from the degeneration of nervous tissue in the spinal cord, in particular sensory neurons essential (through connections with the cerebellum) for directing muscle movement of the arms and legs. The spinal cord becomes thinner and nerve cells lose some of their myelin sheath (the insulating covering on some nerve cells that helps conduct nerve impulses).

* Sezary's syndrome is a rare special variant of cutaneous T cell lymphoma (CTCL) (mycosis fungoides) characterized by universal erythroderma, peripheral lymphadenopathy, and cellular infiltrates of atypical lymphocytes (Sezary cells) in the skin and in the blood. The disease may arise de novo or, less commonly, result from extension of a preexisting circumscribed CTCL. It usually occurs in patients older than 60 years and more commonly in males than in females. Patients appear sick, shivering, and scared and there is generalized scaling erythroderma with considerable thickening of the skin. Because of the bright red color, the syndrome has been called the "red man syndrome". There is diffuse hyperkeratosis of palms and soles, diffuse hair loss which can lead to baldness, and generalized lymphadenopathy. The disease usually shows cutaneous patches, plaques, tumors or generalized erythroderma (Mycosis fungoides). Pruritus is a common symptom. Extracutaneous manifestations are more frequent in the presence of locally advanced disease (cutaneous tumors). The presence of erythroderma with circulating malignant cells (Sezary's cells) in the peripheral blood (PB) and in the bone marrow is consistent with Sezary's syndrome, which is usually associated with lymphadenopathy.

* Stevens-Johnson syndrome (SJS) is a form of toxic epidermal necrolysis which often begins with a fever and flu-like symptoms. Within a few days, the skin begins to blister and peel, forming very painful raw areas called erosions that resemble a severe hot-water burn. The skin erosions usually start on the face and chest before spreading to

other parts of the body. In most affected individuals, the condition also damages the mucous membranes, including the lining of the mouth and the airways, which can cause trouble with swallowing and breathing. The painful blistering can also affect the urinary tract and genitals. SJS often affects the eyes as well, causing irritation and redness of the conjunctiva, which are the mucous membranes that protect the white part of the eye and line the eyelids, and damage to the clear front covering of the eye (the cornea). Severe damage to the skin and mucous membranes makes SJS a life-threatening disease. Because the skin normally acts as a protective barrier, extensive skin damage can lead to a dangerous loss of fluids and allow infections to develop. Serious complications can include pneumonia, overwhelming bacterial infections (sepsis), shock, multiple organ failure, and death. About 10 percent of people with Stevens-Johnson syndrome die from the disease, while the condition is fatal in up to 50 percent of those with toxic epidermal necrolysis. Among people who survive, long-term effects of SJS can include changes in skin coloring (pigmentation), dryness of the skin and mucous membranes (xerosis), excess sweating (hyperhidrosis), hair loss (alopecia), and abnormal growth or loss of the fingernails and toenails. Other long-term problems can include impaired taste, difficulty urinating, and genital abnormalities. A small percentage of affected individuals develop chronic dryness or inflammation of the eyes, which can lead to increased sensitivity to light (photophobia) and vision impairment.

* Strongyloidiasis is an intestinal infection caused by 2 species of the parasitic nematode Strongyloides. The most common and clinically important pathogenic species in humans is S stercoralis. S fuelleborni is found sporadically in Africa and Papua New Guinea. Distinctive characteristics of this parasite are its ability to persist and replicate within a host for decades while producing minimal or no symptoms (individuals with an intact immune system) and its potential to cause life-threatening infection (hyperinfection syndrome, disseminated strongyloidiasis) in an immunocompromised host (60-85% mortality rate). The symptoms related to strongyloidiasis may reflect the nematode's systemic passage, its local cutaneous involvement, or both. During chronic uncomplicated infections, the larvae may migrate to the skin, where they can cause cutaneous strongyloidiasis, known as larva currens because of the quick migratory rate of the larva. Infection is clinically characterized by watery diarrhea, abdominal cramping, and urticarial rash. In malnourished children, strongyloidiasis remains an important cause of chronic diarrhea, cachexia, and failure to thrive.

* A teratoma is a tumor with tissue or organ components resembling normal derivatives of more than one germ layer. Although the teratoma may be monodermal or polydermal (originating from one or more germ layers), its cells may differentiate in ways suggesting other germ layers. The tissues of a teratoma, although normal in themselves, may be quite different from surrounding tissues and may be highly disparate; teratomas have been reported to contain hair, teeth, bone and, very rarely, more complex organs or processes such as brain matter, eyes, torso, and hands, feet, or other limbs. Usually, a teratoma will contain no organs but rather one or more tissues normally found in organs such as the brain, thyroid, liver, and lung. Sometimes, the teratoma has within its capsule one or more fluid-filled cysts; when a large cyst occurs, there is a potential for the teratoma to produce a structure within the cyst that resembles a fetus. Because they

are encapsulated, teratomas are usually benign, although several forms of malignant teratoma are known and some of these are common forms of teratoma. A mature teratoma is typically benign and found more commonly in women, while an immature teratoma is typically malignant and is more often found in men.

* Tuberous sclerosis complex is a genetic disorder characterized by the growth of numerous noncancerous (benign) tumors in many parts of the body. These tumors can occur in the skin, brain, kidneys, and other organs, in some cases leading to significant health problems. Tuberous sclerosis complex also causes developmental problems, and the signs and symptoms of the condition vary from person to person. Virtually all affected people have skin abnormalities, including patches of unusually light-colored skin, areas of raised and thickened skin, and growths under the nails. Tumors on the face called facial angiofibromas are also common beginning in childhood. Tuberous sclerosis complex often affects the brain, causing seizures, behavioral problems such as hyperactivity and aggression, and intellectual disability or learning problems. Some affected children have the characteristic features of autism, a developmental disorder that affects communication and social interaction. Benign brain tumors can also develop in people with tuberous sclerosis complex; these tumors can cause serious or life-threatening complications. Kidney tumors are common in people with tuberous sclerosis complex; these growths can cause severe problems with kidney function and may be life-threatening in some cases. Additionally, tumors can develop in the heart, lungs, and the light-sensitive tissue at the back of the eye (the retina).

* Tumor Breast Non-Malignant is a swelling or lump produced in the breasts due to abnormal growth of tissue. Benign breast tumors are usually soft in consistency and mobile (not fixed). These are slow-growing masses with a clearly demarcated margin or may be encapsulated therefore its removal is fairly easy. Benign breast tumors rarely recur after removal. Spread to distant sites or metastasis is not seen with benign tumors. Benign breast tumor may be of the following types : Fibrocystic Breast Disease, Fibroadenoma, Lipoma, Breast Cyst, Galactocele, Breast abscess, Pseudocyst, Mastitis, Trauma to the Breast, Breast Hamartoma, Pseudolumps, Sclerozing Adenosis, Phyllodes Tumor, Intraductal Papilloma, Lymph Node Swelling.

* A Non-Malignant (Benign) Tumor is a mass of cells (tumor) that lacks the ability to invade neighboring tissue or metastasize. These characteristics are required for a tumor to be defined as cancerous and therefore benign tumors are non-cancerous. Also, benign tumors generally have a slower growth rate than malignant tumors and the tumor cells are usually more differentiated (cells have normal features). Benign tumors are typically surrounded by an outer surface (fibrous sheath of connective tissue) or remain with the epithelium. Common examples of benign tumors include moles and uterine fibroids.

* Uveomeningoencephalitis is a multisystem disease of presumed autoimmune cause, that affects pigmented tissues, which have melanin. The most significant manifestation is bilateral, diffuse uveitis, which affects the eye. Uveomeningoencephalitis may variably also involve the inner ear with effects on hearing, the skin, and the meninges of the

central nervous system. The disease is characterised by bilateral diffuse uveitis, with pain, redness and blurring of vision. The eye symptoms may be accompanied by a varying constellation of systemic symptoms, such as auditory (tinnitus, vertigo, and hypoacusis), neurological (meningismus, with malaise, fever, headache, nausea, abdominal pain, stiffness of the neck and back, or a combination of these factors; meningitis, CSF pleocytosis, cranial nerve palsies, hemiparesis, transverse myelitis and ciliary ganglionitis), and cutaneous manifestations, including poliosis, vitiligo, and alopecia. The vitiligo often is found at the sacral region.

* Vasospasm intracranial is constriction of arteries in the skull due to sudden, sharp, and often persistent smooth muscle contraction in blood vessels. Intracranial vasospasm results in reduced vessel lumen caliber, restricted blood flow to the brain, and brain ischemia that may lead to hypoxic-ischemic brain injury (Hypoxia-Ischemia, Brain).

* Waardenburg syndrome is a group of genetic conditions that can cause hearing loss and changes in coloring (pigmentation) of the hair, skin, and eyes. Although most people with Waardenburg syndrome have normal hearing, moderate to profound hearing loss can occur in one or both ears. The hearing loss is present from birth (congenital). People with this condition often have very pale blue eyes or different colored eyes, such as one blue eye and one brown eye. Sometimes one eye has segments of two different colors. Distinctive hair coloring (such as a patch of white hair or hair that prematurely turns gray) is another common sign of the condition. The features of Waardenburg syndrome vary among affected individuals, even among people in the same family. There are four recognized types of Waardenburg syndrome, which are distinguished by their physical characteristics and sometimes by their genetic cause.

* Xanthomatosis is a condition characterized by deposition of yellowish cholesterol-rich material, called xanthomas, that can appear anywhere in the body in various disease states. They are cutaneous manifestations of lipidosis in which lipids accumulate in large foam cells within the skin. They are associated with hyperlipidemias, both primary and secondary types. Tendon xanthomas are associated with type II hyperlipidemia, chronic biliary tract obstruction, and primary biliary cirrhosis. Palmar xanthomata and tuboeruptive xanthomata (over knees and elbows) occur in type III hyperlipidemia.

* Zellweger syndrome is one of a group of four related diseases called peroxisome biogenesis disorders (PBD). Peroxisomes are cell structures that break down toxic substances and synthesize lipids (fatty acids. oils, and waxes) that are necessary for cell function. Peroxisomes are required for normal brain development and function and the formation of myelin, the whitish substance that coats nerve fibers. They are also required for normal eye, liver, kidney, and bone functions. Zellweger spectrum disorders result from dysfunctional lipid metabolism, including the over-accumulation of very long-chain fatty acids and phytanic acid, and defects of bile acids and plasmalogens--specialized lipids found in cell membranes and myelin sheaths of nerve fibers. Symptoms of these disorders include an enlarged liver; characteristic facial features such as a high forehead, underdeveloped eyebrow ridges, and wide-set eyes; and

neurological abnormalities such as mental retardation and seizures. Infants will Zellweger syndrome also lack muscle tone, sometimes to the point of being unable to move, and may not be able to suck or swallow. Some babies will be born with glaucoma, retinal degeneration, and impaired hearing. Jaundice and gastrointestinal bleeding also may occur.

1.1.25 RTS-17

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Acromegaly, Anisakiasis, Aprosencephaly, Barth Syndrome, Berylliosis, Blastocystis Hominis Infections, Cancer-Adrenocortical CNA, Cancer-Lymphoma B-Cell, Cancer-Multiple Myeloma, Cancer-Pituitary, Cancer-Thymoma, Caroli Disease, Cestode Infections, Chondroma, Costello Syndrome, De Lange Syndrome, Eaton-Lambert Syndrome, Ecthyma Contagiosum, Eperythrozoonosis, Epididymitis, Fisher Syndrome, Gerstmann-Straussler Syndrome, Granuloma Pseudopyogenic, Granuloma Venereum, Hemolytic-Uremic Syndrome, Holoprosencephaly, Hypervitaminosis-A, Inflammatory Bowel Diseases, Juvenile Spinal Muscular Atrophy, Keloid, Lacrimal Duct Obstruction, Lentiginosis Perioral, Ludwig Angina, Male Urogenital Diseases, Meckel Diverticulum, Multiple Hamartoma Syndrome, Niemann-Pick Disease, Nocardia Infections, Oculoauriculovertebral Syndrome, Otosclerosis, Pachygyria, Pellagra, Pemphigus, Porphyria Erythropoietic, Pseudosclerosis, Pulmonary Edema, Relapsing Fever, Retropharyngeal Abscess, Romberg Disease, Salmonella Enteriditis Gut, Schizencephaly, Short Bowel Syndrome, Splenic Rupture, Thrombasthenia, Tinea Versicolor, Toxocariasis, Urea Cycle Disorders, Vesico-Ureteral Reflux, Wolff-Parkinson-White Syndrome, XXY Males,

* Acromegaly is a rare condition in which the body makes too much growth hormone. This causes various symptoms which slowly develop over several years. The most noticeable symptoms are that the hands and feet become larger and features of the face may become more prominent. The cause is usually a small non-cancerous growth (tumour) in the pituitary gland. Rarely, acromegaly is caused by an excess of GHRH which is made in the hypothalamus. This stimulates the cells in the pituitary gland to make too much growth hormone. Very rarely, other tumours in the body can make growth hormone. Common symptoms of acromegaly are: enlarged bones in the face, feet, and hands, excessive hair growth in women, an enlarged jaw or tongue, a prominent brow, excessive growth spurts, which are more common in people who’ve had abnormal growth before adolescence, weight gain, swollen and painful joints that limit movement, spaces between the teeth, splayed fingers and toes, a hoarse, deep voice, fatigue, headaches, an inability to sleep, muscle weakness, profuse sweating, body odor, enlarged sebaceous glands, which are glands that produce oils in the skin, thickened skin, skin tags, which are noncancerous growths. Acromegaly can start any

time after puberty. However, it occurs more often in middle age.

* Anisakiasis is a human parasitic infection of the gastrointestinal tract caused by the consumption of raw or undercooked seafood containing larvae of the nematode Anisakis simplex. Within a few hours of ingestion, the parasitic worm tries to burrow though the intestinal wall, but since it cannot penetrate it, it gets stuck and dies. The presence of the parasite triggers an immune response; immune cells surround the worms, forming a ball-like structure that can block the digestive system, causing severe abdominal pain, malnutrition and vomiting. Occasionally, the larvae are regurgitated. If the larvae pass into the bowel or large intestine, a severe eosinophilic granulomatous response may also occur one to two weeks following infection, causing symptoms mimicking Crohn's disease. Anisakiasis can be easily prevented by adequate cooking at temperatures greater than 60°C or freezing. Even when the fish is thoroughly cooked, Anisakis larvae pose a health risk to humans. Anisakids and related species release a number of biochemicals into the surrounding tissues when they infect a fish. Acute allergic manifestations, such as urticaria and anaphylaxis, may occur with or without accompanying gastrointestinal symptoms. Distribution is worldwide but there is a higher incidence in areas where raw fish is eaten - for example, Japan, the Pacific coast of South America, and the Netherlands.

* Aprosencephaly is an extremely rare anomaly of fetal cerebral development where the derivatives of the telencephalon as well as the diancephalon in the brain are absent or dysplastic, while more caudal structures are normal or mildly deformed. Other signs may include oculo-facial anomalies (i.e. ocular hypotelorism or cyclopia, malformation/absence of nasal structures, cleft lip), preaxial limb defects (i.e. hypoplastic hands, absent halluces) and various other anomalies including ambiguous genitalia, imperforate anus, and vertebral anomalies. It falls under the aprosencephaly / atelencephaly spectrum (AAS). Atelencephaly is also called aprosencephaly with open cranium.

* Barth syndrome is a rare, metabolic, and neuromuscular, genetic disorder that occurs exclusively in males, since it is passed from mother to son through the X chromosome. Although Barth syndrome typically becomes apparent during infancy or early childhood, the age of onset, associated symptoms and findings, and disease course varies considerably, even among affected members of the same family (kindred). Primary characteristics of the disorder include abnormalities of heart and skeletal muscle (cardioskeletal myopathy), low levels of certain white blood cells (neutrophils, neutropenia) that help to fight bacterial infections, and growth retardation, potentially leading to short stature. The disorder is also associated with increased levels of certain organic acids in the urine and blood, such as 3-methylglutaconic aciduria/acidemia. The left ventricle of the heart may show increased thickness as a result of unusually high concentrations of elastic, collagenous fibers (endocardial fibroelastosis). The thickening reduces the ability of the left ventricle to push blood though to the lungs and thus is the prime source of potential heart failure.

* Berylliosis is a form of metal poisoning caused by inhalation of beryllium dusts, vapors,

or its compounds or implantation of the substance in the skin. The toxic effects of beryllium most commonly occur due to occupational exposure. Beryllium is a metallic element used in many industries, including electronics, high-technology ceramics, metals extraction, and dental alloy preparation. There are two forms of beryllium-induced lung disease, acute and chronic. Acute berylliosis has a sudden, rapid onset and is characterized by severe inflammation of the lungs (pneumonitis), coughing, increasing breathlessness (dyspnea), and other associated symptoms and findings. In addition, in some individuals, the skin or the eyes may be affected. The more common, chronic form of the disease develops more slowly and, in some cases, may not become apparent for many years after initial beryllium exposure. Chronic berylliosis is characterized by the abnormal formation of inflammatory masses or nodules (granulomas) within certain tissues and organs and widespread scarring and thickening of deep lung tissues (interstitial pulmonary fibrosis). Although granuloma development primarily affects the lungs, it may also occur within other bodily tissues and organs, such as the skin and underlying (subcutaneous) tissues or the liver. In individuals with chronic berylliosis, associated symptoms and findings often include dry coughing, fatigue, weight loss, chest pain, and increasing shortness of breath.

* Blastocystis hominis is a microscopic organism that may be found in the stools of healthy people who aren't having any digestive symptoms. Blastocystis hominis is also sometimes found in the stools of people who have diarrhea, abdominal pain or other gastrointestinal problems. Researchers don't yet fully understand the role that Blastocystis hominis plays, if any, in causing an infection. Certain forms of Blastocystis hominis may be more likely to be linked to an infection with symptoms. Sometimes, blastocystis simply lives in a person's digestive tract without causing harm. Signs and symptoms that might be associated with blastocystis include: Diarrhea. Nausea . Abdominal cramps. Bloating. Excessive gas (flatulence). Hives. Loss of appetite. Fatigue.

* Caroli disease is a rare genetic disorder that affects the bile ducts, which carry bile from the liver to aid in the digestion of fats. Researchers have identified two forms of Caroli disease. The isolated, or simple, form is characterized by a widening of the bile ducts. The complex form, which is also referred to as Caroli syndrome, is similarly characterized by a widening of the bile ducts, but malformations of the smaller bile ducts, congenital hepatic fibrosis (scarring of liver tissue), high blood pressure, and kidney problems are also present. The differences in the causes for the two forms have not yet been discovered. The first symptoms typically include fever, intermittent abdominal pain, and hepatomegaly. Occasionally, jaundice occurs. Caroli disease usually occurs in the presence of other diseases, such as autosomal recessive polycystic kidney disease, cholangitis, gallstones, biliary abscess, septicemia, liver cirrhosis, renal failure, and cholangiocarcinoma (7% affected). People with Caroli disease are 100 times more at risk for cholangiocarcinoma than the general population.

* Cestode infections are infections with true tapeworms of the helminth subclass Cestoda. All cestodes are parasitic and their life histories vary, but typically they live in the digestive tracts of vertebrates as adults, and often in the bodies of other species of

animals as juveniles. Humans are subject to infection by several species of tapeworms if they eat undercooked meat such as pork (Taenia solium), beef (T. saginata), and fish (Diphyllobothrium spp.), or if they live in, or eat food prepared in, conditions of poor hygiene (Hymenolepis or Echinococcus species).

* A chondroma is a benign cartilaginous tumor, which is encapsulated with a lobular growing pattern. Tumor cells (chondrocytes, cartilaginous cells) resemble normal cells and produce the cartilaginous matrix (amorphous, basophilic material). Characteristic features of this tumor include the vascular axes within the tumor, which make the distinction with normal hyaline cartilage. Based upon location, a chondroma can be described as an enchondroma or ecchondroma. Enchondroma tumor grows within the bone and expands it. Enchondromas are usually found in the small bones of the hand and feet. Most usual symptom is the presence of swelling or the sensation of a lump which is fixed to the underlying bone. Pain may appear as the tumor grows and impinges on the surrounding structures. Ecchondroma grows outward from the bone and this is rare. The tumor is usually seen between the ages of 20 to 40 years. Affects males and females equally. The most common location of the tumor is the upper part of the humerus or arm bone.

* Costello syndrome is a rare genetic disorder that affects various parts of the body. Delayed physical and mental development are the most distinguishing characteristics of the condition. Further complications can develop, such as the development of malignant and nonmalignant tumors, heart defects, and abnormal heart muscle growth. Common heart problems include hypertrophic cardiomyopathy, which is an enlargement of the heart that weakens the heart muscle, abnormal heart beats, or arrhythmia, and other structural defects. Most of the signs of Costello syndrome are not noticeable at birth, but they appear as a child starts to grow. The birth weight of a child with Costello syndrome is usually normal or a little above average, but they will grow at a slower rate than most children. Some of these symptoms are: Short height and slow growth. Cognitive deficiency. Flatter nasal bridge. Curly hair. Difficulty sucking. Large head. Loose skin. Low ears, thick earlobes, or both. Thicker lips than usual. The surface of face feels rough. Squint. Dark pigmentation on skin. Heart problems, including abnormal heart rhythm. Two other genetic conditions that have similar symptoms to Costello syndrome are Noonan syndrome and cardiofaciocutaneous syndrome (CFC). The overlapping symptoms make it harder to diagnose Costello syndrome during infancy.

* Cornelia de Lange syndrome is a developmental disorder that affects many parts of the body. The features of this disorder vary widely among affected individuals and range from relatively mild to severe. Cornelia de Lange syndrome is characterized by slow growth before and after birth leading to short stature; intellectual disability that is usually moderate to severe; and abnormalities of bones in the arms, hands, and fingers. Most people with Cornelia de Lange syndrome also have distinctive facial features, including arched eyebrows that often meet in the middle (synophrys), long eyelashes, low-set ears, small and widely spaced teeth, and a small and upturned nose. Many affected individuals also have behavior problems similar to autism, a developmental condition that affects communication and social interaction. Additional signs and symptoms of

Cornelia de Lange syndrome can include excessive body hair (hypertrichosis), an unusually small head (microcephaly), hearing loss, and problems with the digestive tract. Some people with this condition are born with an opening in the roof of the mouth called a cleft palate. Seizures, heart defects, and eye problems have also been reported in people with this condition.

* Eaton-Lambert syndrome or Lambert-Eaton myasthenic syndrome (LEMS) is a very rare condition that affects the signals sent from the nerves to the muscles. It means the muscles are unable to tighten (contract) properly, resulting in muscle weakness and a range of other symptoms. About half of LEMS cases occur in middle-aged or older people with lung cancer. The remaining cases aren't associated with cancer and can start at any age. The main symptoms are weakness in the legs, arms, neck and face, as well as problems with automatic body functions, such as controlling blood pressure. Common symptoms include: aching muscles, difficulty walking and climbing stairs, difficulty lifting objects or raising the arms, drooping eyelids, dry eyes and blurred vision, swallowing problems, dizziness upon standing, a dry mouth, constipation, erectile dysfunction in men, strength that temporarily improves when exercising, only to reduce as exercise continues. LEMS is caused by the body's natural defences (the immune system) mistakenly attacking and damaging the nerves. Normally, nerve signals travel down the nerves and stimulate the nerve endings to release a chemical called acetylcholine. This chemical then helps activate the muscles. If the nerve endings are damaged, the amount of acetylcholine they produce decreases, which means nerve signals don't reach the muscles properly.

* Contagious ecthyma results from infection by the orf virus, a member of the genus Parapoxvirus in the family Poxviridae. Contagious ecthyma is a highly contagious, zoonotic, viral skin disease that affects sheep, goats and some other domesticated and wild ruminants. Goats and sheep can spread the disease to humans - Contagious Ecthyma is a zoonotic disease. If exposed, humans can develop the lesion(s) in 3-7days. A single, red sore is typically seen on a finger, hand or other exposed part of the body. The lesion may be painful but it tends to heal spontaneously without scarring, in 3-6 weeks. People do not infect other people.

* Eperythrozoonosis is an infection caused by hemophilic mycoplasma bacteria of the genus Eperythrozoon. They rarely infect humans but it can be fatal for farm animals and pets. The infection is mostly innocuous but in times of stress, e.g. in the presence of another disease, it may cause an acute anemia accompanied by jaundice and fever. There is no hemoglobinuria. The infection is spread by insects and exposure to farm animals or mice feces. The disease may be seasonal as a result. In many cases the disease is a subacute one with illthrift as the main presenting sign. Infected humans may be asymptomatic or have various clinical signs, including acute fever, anemia, and severe hemolytic jaundice, especially in infected neonates. Pregnant women and newborns are reported to be more vulnerable to the disease than others and to show more severe clinical signs after infection. Symptoms of human infection are: fever, pneumonia, coughing, mental confusion, agglutination.

* Epididymitis is inflammation of the epididymis. The epididymis is a coiled tube inside the scrotum. It stores and carries sperm from the testicles to the penis. Acute epididymitis lasts for 6 weeks or less. Chronic epididymitis lasts longer than 6 weeks. Epididymitis may be caused by any of the following: A urinary tract infection (UTI) that spreads to the epididymis. Urine that flows backward from the urethra to the epididymitis. Use of heart medicine called amiodarone. Sexually transmitted infections (STIs) such as gonorrhea or Chlamydia. The risks of epididymitis increases under these circumstances: Urinary tract conditions that cause frequent UTIs. Having an indwelling urinary catheter (thin, flexible tube inserted into the bladder and left in place to drain urine). Recent surgery of the urinary tract. Physical strain that puts pressure on the abdomen, such as heavy lifting. Prostate disorders such as benign prostatic hypertrophy or prostatitis. Signs and symptoms of epididymitis include: Pain or tenderness in the scrotum, abdomen, or groin. Redness or swelling of the scrotum. Pain or burning during urination, or frequent urination. Discharge from the penis or blood in the urine or semen. Fever.

* Fisher syndrome, also Miller-Fisher syndrome is a variant of Guillain-Barre syndrome, characterized by ophthalmoplegia, ataxia and areflexia. These clinical signs can overlap with other signs and symptoms of Guillain-Barre syndrome. Although it is assumed that Fisher syndrome is idiopathic, it was observed that this disease can develop after a recent viral, bacterial or mycoplasma infections and after vaccinations. Association with Campylobacter jejuni infection was also mentioned . Fisher syndrome occurs in both sexes, with a slight predominance in males. Clinically, symptomatic triad consisting of ophthalmoplegia, ataxia and areflexia is characteristic for this syndrome. Ophthalmoplegia tends to be complete, sometimes have been observed cases of internuclear ophthalmoplegia and Parinaud syndrome (a group of abnormalities of eye movement and pupil dysfunction). Palpebral ptosis is also present and may be unilateral or bilateral, symmetrical or asymmetrical, complete or incomplete. Pupillary disturbances occur in over 50% of cases of Fisher syndrome and are characterized by reduction of pupillary reaction to light, accommodation disorders and anisocoria (unequal size of the pupils). Ataxia is a result of peripheral non-myelinated spinocerebellar fibers conduction disturbances , being a truncal ataxia. Have been reported cases of Fisher syndrome associated with retrobulbar optic neuritis and accompanied by vision loss, with complete or incomplete vision recovery. Cranial nerve impairment occurs, especially of the facial nerve, causing facial paralysis which can be unilateral or bilateral. Other cranial nerves which can be affected are ophthalmic branch of cranial nerve V (trigeminal nerve) and cranial nerve VIII (acoustic). Cranial nerves II (optic) and III (oculomotor) are less affected in this disease. A characteristic of Fisher syndrome is the occurrence of migratory paresthesias, which are not usually accompanied by sensitive deficits. Sometimes, cases of sensitive ataxia have been reported. Neurological disorders in Fisher syndrome affects, in most cases, the peripheral nervous system. In some patients were reported impairments of central nervous system, accompanied by dysarthria, nystagmus, ataxic gait, ophthalmoparesis, pronounced tendon reflexes and positive Babinski sign). In some cases distinction between Fisher syndrome and brainstem encephalitis is very difficult.

* Gerstmann-Straussler-Scheinker disease (GSS) is an extremely rare, neurodegenerative brain disorder. It is almost always inherited and is found in only a few families around the world. Onset of the disease usually occurs between the ages of 35 and 55. In the early stages, patients may experience varying levels of ataxia (lack of muscle coordination), including clumsiness, unsteadiness, and difficulty walking. As the disease progresses, the ataxia becomes more pronounced and most patients develop dementia. Other symptoms may include dysarthria (slurring of speech), nystagmus (involuntary movements of the eyes), spasticity (rigid muscle tone), and visual disturbances, sometimes leading to blindness. Deafness also can occur. In some families, parkinsonian features are present. GSS belongs to a family of human and animal diseases known as the transmissible spongiform encephalopathies (TSEs). Other TSEs include Creutzfeldt-Jakob disease, kuru, and fatal familial insomnia.

* Granuloma pseudopyogenic usually presents with pink to red-brown, dome-shaped, solitary or multiple benign cutaneous nodules comprised of immature and mature vascular structures intermingled with endothelial cells and a varied infiltrate of eosinophils, histiocytes, lymphocytes, and mast cells. It has been suggested as a feature of IgG4-related skin disease.

* Granuloma venereum (also known as donovanosis) is a bacterial disease caused by Klebsiella granulomatis characterized by ulcerative genital lesions. It is endemic in many less developed regions. Small, painless nodules appear after about 10–40 days of the contact with the bacteria. Later, the nodules burst, creating open, fleshy, oozing lesions. The infection spreads, mutilating the infected tissue. The infection will continue to destroy the tissue until treated. The lesions occur at the region of contact typically found on the shaft of the penis, the labia, or the perineum. Rarely, the vaginal wall or cervix is the site of the lesion. The destructive nature of donovanosis also increases the risk of superinfection by other pathogenic microbes.

* Hemolytic uremic syndrome (HUS) is a condition characterized by destruction of red blood cells, low platelet count, and kidney failure. There are two types of HUS. Typical HUS follows a diarrheal infection often caused by E. coli. Atypical HUS is not associated with an infection of the digestive tract and has a less favorable outcome. Symptoms of HUS include vomiting and diarrhea (often bloody), weakness, lethargy, and bruising (purpura). These symptoms are due to a combination of dehydration, anemia (due to the destruction of red blood cells and low platelet counts), and uremia (the inability of the kidneys to clear waste products from the body).

* Holoprosencephaly (HPE) is a complex brain malformation resulting from incomplete cleavage of the prosencephalon, occurring between the 18th and the 28th day of gestation and affecting both the forebrain and the face. It is estimated to occur in 1/16,000 live births and 1/250 conceptuses. Three ranges of increasing severity are described: lobar, semi-lobar and alobar HPE. Another milder subtype of HPE called middle interhemispheric variant (MIHF) or syntelencephaly is also reported. In most of the cases, facial anomalies are observed in HPE, like cyclopia, proboscis, median or bilateral cleft lip/palate in severe forms, ocular hypotelorism or solitary median maxillary

central incisor in minor forms. These latter midline defects can occur without the cerebral malformations and then are called microforms. Children with HPE have many medical problems: developmental delay and feeding difficulties, epilepsy, instability of temperature, heart rate and respiration. Endocrine disorders like diabetes insipidus, adrenal hypoplasia, hypogonadism, thyroid hypoplasia and growth hormone deficiency are frequent.

* Hypervitaminosis A causes blurred vision, softened skull bones in children, dizziness, vomiting, liver damage, hair and skin problems. Vitamin A (also known as retinol) is a key nutrient required for the formation and preservation of healthy bones, skin, teeth, and soft tissues. It is also responsible for producing certain pigments found in the eye, and aids in reproduction and breastfeeding. If abnormally excess amounts of vitamin A builds-up in the liver, due to sudden overdose of the substance, or through accumulation of small doses over prolonged periods of time, it leads to a toxic condition called Hypervitaminosis A. Most common cause of Hypervitaminosis A is through excess supplementation or accidental overdose of vitamin A.

* Inflammatory bowel disease (IBD) is a group of inflammatory conditions of the colon and small intestine. Crohn's disease and ulcerative colitis are the principal types of inflammatory bowel disease. It is important to note that not only does Crohn's disease affect the small intestine and large intestine, it can also affect the mouth, esophagus, stomach and the anus whereas ulcerative colitis primarily affects the colon and the rectum. Inflammatory bowel diseases fall into the class of autoimmune diseases, in which the body's own immune system attacks elements of the digestive system. Although the symptoms of Crohn's disease and ulcerative colitis are similar, they are not identical. Abdominal pain and diarrhea are common to both diseases as is loss of weight and fever. Ulcerative colitis tends to be associated with more bleeding due to the extensive erosion by inflammation of the blood vessels supplying the lining of the colon. On the other hand, symptoms of obstruction of the bowel (pain, nausea and vomiting, and abdominal distension) are more common in Crohn's disease because the entire wall of the bowel is inflamed. The more extensive inflammation causes more swelling than the superficial inflammation of ulcerative colitis that can obstruct the flow of digesting food through the bowel. Possible complications of IBD include: malnutrition with resulting weight loss, colon cancer, fistulas (ulcers that go through the bowel wall, creating a hole between different parts of the digestive tract), intestinal rupture (or perforation), bowel obstruction. In rare cases, a severe bout of IBD can make you go into shock. This can be life-threatening. Shock is usually caused by blood loss during a long, sudden episode of bloody diarrhea.

* Juvenile spinal muscular atrophy is a rare neuromuscular disorder characterised by loss of motor neurons and progressive muscle wasting, often leading to early death. Spinal muscular atrophy manifests in various degrees of severity, which all have in common progressive muscle wasting and mobility impairment. Proximal muscles and lung muscles are affected first. Other body systems may be affected as well, particularly in early-onset forms of the disorder. SMA is the most common genetic cause of infant death. The juvenile form usually manifests after 12 months of age and describes people

with SMA3 who are able to walk without support at some time, although many later lose this ability. Respiratory involvement is less noticeable than in SMA1 and SMA2, and life expectancy is normal or near normal. The symptoms vary greatly depending on the SMA type involved, the stage of the disease, and individual factors; they commonly include: Areflexia, particularly in extremities. Overall muscle weakness, poor muscle tone, limpness or a tendency to flop. Difficulty achieving developmental milestones, difficulty sitting/standing/walking. In small children: adopting of a frog-leg position when sitting (hips abducted and knees flexed). Loss of strength of the respiratory muscles: weak cough, weak cry (infants), accumulation of secretions in the lungs or throat, respiratory distress. Bell-shaped torso (caused by using only abdominal muscles for respiration) in weaker SMA types. Fasciculations (twitching) of the tongue. Difficulty sucking or swallowing, poor feeding.

* Keloid, also known as keloid disorder and keloidal scar, is the formation of a type of scar which, depending on its maturity, is composed mainly of either type III (early) or type I (late) collagen. It is a result of an overgrowth of granulation tissue (collagen type 3) at the site of a healed skin injury which is then slowly replaced by collagen type 1. Keloids are firm, rubbery lesions or shiny, fibrous nodules, and can vary from pink to the color of the patient's flesh or red to dark brown in color. A keloid scar is benign and not contagious, but sometimes accompanied by severe itchiness, pain, and changes in texture. In severe cases, it can affect movement of skin. Keloids should not be confused with hypertrophic scars, which are raised scars that do not grow beyond the boundaries of the original wound.

* Lacrimal or nasolacrimal duct obstruction (NLDO) is the obstruction of nasolacrimal duct and may be either congenital or acquired. Obstruction of the nasolacrimal duct leads to the excess overflow of tears called epiphora. Involutional stenosis is probably the most common cause of NLD obstruction in older persons. It affects women twice as frequently as men. Dacryoliths or cast formation, within the lacrimal sac can also produce obstruction of the NLD. Sinus disease often occurs in conjunction with, and in other instances may contribute to the development of NLD obstruction. Naso-orbital fractures may involve the NLD. Granulomatous disease, including sarcoidosis, granulomatosis with polyangiitis,and midline granuloma, may also lead to NLD obstruction. As with similar cases of canalicular obstruction, dislodged punctal and canalicular plugs can migrate to and occlude the NLD. Neoplasm should be considered in any patient presenting with NLD obstruction.In patients with an atypical presentation, including younger age and male gender,further workup is appropriate. Bloody punctal discharge or lacrimal sac distension above the medial canthal tendon is also highly suggestive of neoplasm. Congenital nasolacrimal duct obstruction, or dacryostenosis, occurs when the lacrimal duct has failed to open at the time of birth, most often due to an imperforate membrane at the valve of Hasner. Around 6% of infants have CLDO, usually experiencing a persistent watery eye even when not crying. If a secondary infection occurs (Dacryocystitis), purulent (yellow / green) discharge may be present.

* Lentiginosis perioral, also Peutz-Jeghers syndrome is characterized by the development of noncancerous growths called hamartomatous polyps in the

gastrointestinal tract (particularly the stomach and intestines) and a greatly increased risk of developing certain types of cancer. Children with Peutz-Jeghers syndrome often develop small, dark-colored spots on the lips, around and inside the mouth, near the eyes and nostrils, and around the anus. These spots may also occur on the hands and feet. They appear during childhood and often fade as the person gets older. In addition, most people with Peutz-Jeghers syndrome develop multiple polyps in the stomach and intestines during childhood or adolescence. Polyps can cause health problems such as recurrent bowel obstructions, chronic bleeding, and abdominal pain. People with Peutz-Jeghers syndrome have a high risk of developing cancer during their lifetimes. Cancers of the gastrointestinal tract, pancreas, cervix, ovary, and breast are among the most commonly reported tumors.

* Ludwig's angina is a serious, potentially life-threatening cellulitis, or connective tissue infection, of the floor of the mouth, usually occurring in adults with concomitant dental infections and if left untreated, may obstruct the airways, necessitating tracheostomy. Dental infections account for approximately 80% of cases of Ludwig's angina. Mixed infections, due to both aerobes and anaerobes, are of the cellulitis associated with Ludwig's angina. Typically, these include alpha-hemolytic streptococci, staphylococci and bacteroides groups. The route of infection in most cases is from infected lower molars or from pericoronitis, which is an infection of the gums surrounding the partially erupted lower (usually third) molars. Although the widespread involvement seen in Ludwig's usually develops in immunocompromised persons, it can also develop in otherwise healthy individuals. Ludwig's angina is a fascial space infection with bilateral involvement of the submandibular, sublingual and submental spaces. The external signs may include bilateral lower facial edema around the mandible and upper neck. Intraoral signs may include a raised floor of mouth due to sublingual space involvement and posterior displacement of the tongue. Symptoms may include dysphagia, odynophagia, difficulty breathing, and pain.

* Male Urogenital Diseases refers to pathological processes of the male urinary tract and the reproductive system (male genitalia).

* Meckel's diverticulum is a pouch on the wall of the lower part of the intestine that is present at birth (congenital). The diverticulum may contain tissue similar to that of the stomach or pancreas. This tissue is left over from when the baby's digestive tract was forming before birth. A small number of people have a Meckel's diverticulum. However, only a few develop symptoms. Symptoms may include: Pain in the abdomen that can be mild or severe. Blood in the stool. Nausea and vomiting. Symptoms often occur during the first few years of life. However, they may not start until adulthood. Complications may include: Excess bleeding (hemorrhage) from the diverticulum. Folding of the intestines (intussusception), a type of blockage. Peritonitis. Tear (perforation) of the bowel at the diverticulum.

* Multiple hamartoma syndrome is a condition characterized by more than one hamartoma. A hamartoma is a mostly benign, focal malformation that resembles a neoplasm in the tissue of its origin. Cutaneous features include: Benign lesions of the

skin and mucosa, known as hamartomas (benign tumours made up of a mixture of mature cells normally found in that tissue). At least one of the four types of skin lesions are present in nearly all cases. Facial papules – flesh-coloured flat-topped dry or warty 1-5mm papules around the mouth, nostrils and eyes. Oral lesions – numerous 1-3 mm smooth whitish spots on the gums and palate that join together to create a cobblestone appearance known as papillomatosis. Acral keratoses – flesh-coloured or slightly pigmented smooth or warty papules on the upper surface of hands and feet. These occur in more than 60% of patients. Palmoplantar keratoses – scaly spots on the palms and soles occur in about 40% of patients. Other skin lesions occurring less frequently include lipomas, neuromas and haemangiomas. Non-cutaneous features include: Abnormalities of the thyroid are present in about 60% of patients. These are usually harmless growths but occasionally may be cancerous. Breast tumours: These are the most important non-cutaneous association. Fibrocystic disease resulting in benign lumps in the breasts is present in about 75% of women. Breast cancer occurs in 20-36% of patients. Gastrointestinal polyps and other abnormalities are present in about 72% of patients. Genitourinary tract involvement may include ovarian cysts and cancers. Central nervous system – development of Lhermitte-Duclos disease caused by hamartomatous growths of the cerebellum (rare). Skeletal abnormalities such as bone cysts. At least 40% of patients with multiple hamartoma syndrome have at least one cancer.

* Niemann-Pick disease is an inherited disease that affects lipid metabolism, or the way fats, lipids, and cholesterol are stored in or removed from the body. People with Niemann-Pick disease have an abnormal lipid metabolism that causes a buildup of harmful amounts of lipids in various organs. The disease primarily affects the: liver, spleen, brain, bone marrow. This leads to enlargement of the spleen and neurologic problems. Niemann-Pick disease involves dysfunctional metabolism of sphingolipids, which are fats found in cell membranes, so it is a kind of sphingolipidosis. Sphingolipidoses, in turn, are included in the larger family of lysosomal storage diseases. Symptoms are related to the organs in which sphingomyelin accumulates. Enlargement of the liver and spleen (hepatosplenomegaly) may cause reduced appetite, abdominal distension, and pain. Enlargement of the spleen (splenomegaly) may also cause low levels of platelets in the blood (thrombocytopenia). Accumulation of sphingomyelin in the central nervous system (including the cerebellum) results in unsteady gait (ataxia), slurring of speech (dysarthria), and difficulty in swallowing (dysphagia). Basal ganglia dysfunction causes abnormal posturing of the limbs, trunk, and face (dystonia). Upper brainstem disease results in impaired voluntary rapid eye movements (supranuclear gaze palsy). More widespread disease involving the cerebral cortex and subcortical structures causes gradual loss of intellectual abilities, causing dementia and seizures. Bones also may be affected: symptoms may include enlarged bone marrow cavities, thinned cortical bone, or a distortion of the hip bone called coxa vara. Sleep-related disorders, such as sleep inversion, sleepiness during the day and wakefulness at night, may occur. Gelastic cataplexy, the sudden loss of muscle tone when the affected patient laughs, is also seen.

* Nocardiosis is a rare infection caused by the Nocardia asteroides bacterium. This type

of bacteria can be found in the soil and water of regions around the world. People may become infected with this bacteria when they inhale it or when the bacteria enter an open wound. The infection can't be spread from one person to another. Nocardiosis most commonly occurs in the lungs, but it may spread to other areas of the body, such as the: skin, digestive system, brain, kidneys, heart, eyes, bones. Though nocardiosis can develop in anyone, the condition is much more likely to affect people with very weak immune systems. The symptoms will vary depending on the area of the body that has become infected. Nocardiosis most commonly affects the lungs with fever, fatigue, chest pain, a cough, night sweats. The skin is the second most commonly affected area with open, seeping sores, ulcers, rashes, swollen lymph nodes. In some cases, the infection can spread to other parts of the body and cause varying symptoms. In the digestive system, nausea, vomiting, sudden weight loss, abdominal swelling. In the brain, seizures, headaches, confusion, dizziness.

* Oculoauriculovertebral Syndrome or Goldenhar syndrome is a craniofacial syndrome, which means that it causes certain abnormalities in the formation of the face and head. It is considered a rare disease and a congenital one, meaning it's present at birth. Goldenhar is present in just 1 out of every 3,500 to 25,000 babies at birth. In people with Goldenhar syndrome, abnormalities appear mostly in the areas of the ears, eyes, and spine. This condition can also affect the structure of the face, and some internal organs. The severity of the abnormalities and symptoms varies by individual. The symptoms of Goldenhar and their severity are extremely variable from one individual to another. The most recognizable symptom is the presence of facial abnormalities, in particular hemifacial microsomia. These occur when the bones and muscles in the face are underdeveloped on just one side of the face. Those with Goldenhar may also have a cleft lip or cleft palate. Other characteristics of the syndrome include defects in the eyes, ears, and spine. This can mean growths on the eyes, small eyes, missing eyelids, small ears, missing ears, ear tags, or even hearing loss. In the spine, Goldenhar can cause incomplete development of vertebrae, or fused or missing vertebrae. Many people with the syndrome end up with scoliosis, or a curved spine, as a result. There are other less common, and less visible, symptoms as well. Between 5 and 15 percent of people with Goldenhar have some degree of intellectual disability. Some also have abnormalities in internal organs, which most commonly include congenital heart defects. Defects affecting the kidneys and limbs are rare.

* Otosclerosis is a condition in which there's abnormal bone growth inside the ear. It's a fairly common cause of hearing loss in young adults. There are three tiny bones deep inside the ear, which vibrate when sound waves enter. They transmit sound waves to the cochlea (inner ear), which converts them into signals that are sent to the brain. In otosclerosis, the stapes ("stirrup" bone) begins to fuse with the surrounding bone, eventually becoming fixed so it can't move. This means sound is no longer transmitted into the inner ear efficiently. Most people with otosclerosis notice hearing problems in their 20s or 30s. One or both ears can be affected. Symptoms of otosclerosis include: hearing loss that gets gradually worse over time, particular difficulty hearing low, deep sounds and whispers, speaking quietly because your voice sounds loud to you, finding it easier to hear when there's background noise (unlike many other types of hearing loss),

tinnitus (hearing sounds such as buzzing or humming that come from inside your body), dizziness – though this is rare. The symptoms of otosclerosis can be hard to tell apart from other causes of hearing loss.

* Pachygyria is a developmental condition due to abnormal migration of nerve cells (neurons) in the developing brain and nervous system. With pachygyria, there are few gyri (the ridges between the wrinkles in the brain), and they are usually broad and flat. The condition is also known as incomplete lissencephaly. Pachygyria may occur alone (isolated) or as part of various underlying syndromes. Symptoms vary among affected people and may include moderate to severe developmental delay, seizures, poor muscle tone and control, feeding or swallowing difficulties, and small head size (microcephaly).

* Pellagra is a nutritional wasting illness caused by a deficiency of niacin (Vitamin B3) and tryptopan, in the body. Niacin plays an important part in cell respiration, where both nutrients and oxygen are absorbed by the body for the storage and production of energy. Niacin can be found in yeast, meat, fish, liver, breads, legumes and whole grain cereals. An adult requires at least 15 - 20mg of niacin daily. Tryptopan, meanwhile, is an essential amino acid that can also be found in meat, fish, poultry, fish, eggs and some dairy products, like milk. Pellagra is prevalent among regions whose primary food source is untreated maize, which is a poor source of niacin and tryptopan. Areas in rural South America, whose staple food is corn, and Africa, with its cases of malnutrition, are examples of these places. Pellagra is also seen in regions where sorghum, or millet is a staple in the diet. This type of grain contains large amounts of leucine, which prevent tryptophan from metabolizing, which in turn interferes with the synthesis of niacin in the body. Some accompanying symptoms are: diarrhea, dermatitis (a scaly skin rash), dementia, and if left untreated, death. Symptoms of the disease are more pronounced in adults than they are in infants and very young children. Other symptoms of Pellagra include a high sensitivity when exposed to sunlight; irritability and aggression; red skin lesions and rashes; mouth ulcers; poor appetite, nausea and vomiting; restlessness, anxiety and insomnia; tremors, delusions and mental confusion; seizures; weakness; ataxia (a balance disorder); headaches; depression; stupor, and glossitis (a tongue infection accompanied by inflamation).

* Pemphigus is a group of rare autoimmune diseases that cause blistering of the skin and mucous membranes (mouth, nose, throat, eyes, and genitals). Some forms of the disease, including the most common form, may be fatal if left untreated. Normally, our immune system produces antibodies that attack viruses and harmful bacteria to keep us healthy. In people with pemphigus, however, the immune system mistakenly attacks the cells in the epidermis, or top layer of the skin, and the mucous membranes. The immune system produces antibodies against proteins in the skin known as desmogleins. These proteins form the glue that keeps skin cells attached and the skin intact. When desmogleins are attacked, skin cells separate from each other and fluid can collect between the layers of skin, forming blisters that do not heal. In some cases, these blisters can cover a large area of skin. It is unclear what triggers the disease, although it appears that some people have a genetic susceptibility.

* Erythropoietic porphyria (EP) is a rare inborn error of porphyrin-heme synthesis inherited that is as an autosomal recessive trait. The inheritance of 2 mutant alleles for the gene encoding the enzyme uroporphyrinogen III synthase leads to accumulation of porphyrins of the isomer I type that are biologically useless but cause cutaneous photosensitivity characterized by blisters, erosions, and scarring of light-exposed skin. Clinical manifestations can range from mild to severe. Chronic damage of skin, cartilage, and bones can cause mutilation. Hypertrichosis, erythrodontia, and reddish-colored urine are often present. Hemolytic anemia can be mild or severe, with resultant splenomegaly and osseous fragility.

* Pseudosclerosis or Wilson's disease is a rare genetic condition that affects about one in 30,000 people. Wilson disease causes a person's body to store too much of the mineral copper. Many foods contain copper, and it is important for people to have a small amount of copper in the body. However, high levels of copper can damage organs in the body. In Wilson disease, copper builds up in the liver, brain, eyes and other organs. Over time, the extra copper can lead to organ damage that may cause death. Wilson disease may affect several of the body's systems. Either the liver or the brain can be harmed first, with signs as early as 4 years, or as late as 70 years of age. Symptoms of liver disease include: Jaundice, which is when the skin or the white part of the eye turns yellow. Fatigue. Loss of appetite. Swelling in the abdomen. Easy bruising.Nervous system or mental health problems can develop in children or young adults who have Wilson disease. These problems include: Clumsiness. Trembling. Difficulty walking. Problems with speech. Problems with school work. Depression. Anxiety. Mood swings. Eye changes and vision problems may also occur. These include: Kayser-Fleischer rings, which are green-to-brownish rings around the iris of the eye. Difficulties with eye movement, particularly in looking upwards. In addition, people who have Wilson disease may experience: A low level of red blood cells, which is called anemia. Low levels of white blood cells. Low levels of clotting factors called platelets. Slow clotting of blood. High levels of protein, amino acids and uric acid in the urine. Early onset of arthritis and bone loss.

* Pulmonary edema is fluid accumulation in the tissue and air spaces of the lungs. It leads to impaired gas exchange and may cause respiratory failure. It is due to either failure of the left ventricle of the heart to remove blood adequately from the pulmonary circulation (cardiogenic pulmonary edema), or an injury to the lung parenchyma or vasculature of the lung (noncardiogenic pulmonary edema). The symptoms for long-term pulmonary edema include: shortness of breath when being physically active, difficulty breathing when lying down, wheezing, waking up at night with a breathless feeling that goes away when you sit up, rapid weight gain, especially in the legs, swelling in the lower part of the body, fatigue. Pulmonary edema due to high altitude sickness, or not getting enough oxygen in the air, has symptoms that include: headaches, irregular, rapid heartbeats, shortness of breath after exertion and during rest, coughing, fever, difficulty walking uphill and on flat surfaces.

* Relapsing fever is an infection caused by several species of bacteria in the Borrelia

family. There are two major forms of relapsing fever: Tick-borne relapsing fever (TBRF) or endemic relapsing fever is transmitted by the Ornithodoros tick. The illness occurs mainly in rural communities where people are in close proximity to small mammals that carry the soft-bodied ticks, in a chronic endemic pattern. Louse-borne relapsing fever (LBRF) or epidemic relapsing fever is transmitted by body lice. Causes epidemic outbreaks of illness when public-health maintenance breaks down, eg during wars, famine, conditions of widespread poverty, displacement and overcrowding (estimated 10 million people affected during/after World War II). Sudden fever occurs within 2 weeks of infection. In LBRF, the fever usually lasts 3-6 days and is usually followed by a single, milder episode. In TRBF, multiple episodes of fever occur and each may last up to 3 days. Individuals may be free of fever for up to 2 weeks before it returns. In both forms, the fever episode may end in "crisis." This consists of shaking chills, followed by intense sweating, falling body temperature, and low blood pressure. This stage may result in death in up to 10% of people. After several cycles of fever, some people can develop dramatic central nervous system signs such as seizures, stupor, and coma. The Borrelia organism can also invade heart and liver tissues, causing inflammation of the heart muscle (myocarditis) and liver (hepatitis). Bleeding throughout the body and pneumonia are other complications.

* A retropharyngeal abscess is a collection of pus in the lymph nodes at the back of the throat, caused by a bacterial infection. Symptoms include difficulty and pain when swallowing, a fever, stiff neck, and noisy breathing. Because the lymph nodes at the back of the throat begin to disappear by age 4 to 5 years, retropharyngeal abscesses are more common among children aged 1 to 8 than adults. The main symptoms are difficulty and pain when swallowing, a fever, and enlargement of the lymph nodes in the neck. The voice is muffled, and children may drool. The neck may be stiff, and children may hold their head at an angle. The abscess can block the airway, making breathing difficult and noisy, particularly when children inhale (called stridor). Children may lie on their back, tilt their head and neck back, and raise their chin to make breathing easier. Adults may have severe neck pain but do not always have stridor. Complications include bleeding around the abscess, rupture of the abscess into the airway (which can block the airway), and pneumonia. The voice box (larynx) may go into spasm and further interfere with breathing. Blood clots may form in the jugular veins of the neck. Infection may spread down into the chest. Sometimes widespread inflammation and infection of the bloodstream occurs, causing organs to malfunction (a condition called septic shock).

* Romberg Diseasee, also known as Progressive hemifacial atrophy, is an uncommon degenerative and poorly understood condition. It is characterized by a slow and progressive atrophy affecting one side of the face. The incidence and the cause of this alteration are unknown. A cerebral disturbance of fat metabolism has been proposed as a primary cause. This can be result of a trophic malformation of cerebral sympathetic nervous system. Possible factors that are involved in the pathogenesis are trauma, viral infections, heredity, endocrine disturbances, and autoimmunity, among others. Characteristically, atrophy progresses slowly for several years and, soon after, it become stable.

* Salmonella Enteritidis (SE) is one of the most prevalent infectious bacteria and the leading cause of Salmonellosis in the world. Salmonella Enteriditis bacteria may be found in the intestinal tracts of livestock, poultry, dogs, cats and other warm-blooded animals. This strain is only one of about 2,000 kinds of Salmonella bacteria; it is often associated with poultry and shell eggs. Salmonella enteriditis bacteria causes food poisoning and gastroenteritis. Symptoms of Salmonella include fever, abdominal cramps, and diarrhea. Symptoms usually only last for a day or two, however, serious complications can result from salmonella.

* Schizencephaly is a rare birth defect. It causes slits or clefts in the cerebral hemispheres of the brain. These clefts may appear on one or both sides of the brain. They may be filled with cerebrospinal fluid. The symptoms of schizencephaly can vary depending on whether it presents clefts on both sides of the brain, which are bilateral, or only one side, which are unilateral. Unilateral clefts almost always produce paralysis on one side of the body. Most people with unilateral clefts have normal to near normal intelligence. Bilateral clefts tend to cause more serious symptoms than unilateral clefts. They often cause developmental delays, including delays in learning speech and language skills. They can also cause problems with movement due to poor communication between brain and spinal cord. Other symptoms of schizencephaly can include: poor muscle tone, partial or complete paralysis, a smaller than normal head, accumulation of excess fluid in the brain, recurring seizures.

* Short-bowel syndrome is a disorder clinically defined by malabsorption, diarrhea, steatorrhea, fluid and electrolyte disturbances, and malnutrition. The final common etiologic factor in all causes of short-bowel syndrome is the functional or anatomic loss of extensive segments of small intestine so that absorptive capacity is severely compromised. Although resection of the colon alone typically does not result in short-bowel syndrome, the condition's presence can be a critical factor in the management of patients who lose significant amounts of small intestine. Massive small intestinal resection compromises digestive and absorptive processes. Adequate digestion and absorption cannot take place, and proper nutritional status cannot be maintained without supportive care. Today, the most common causes of short-bowel syndrome in adults include Crohn disease, radiation enteritis, mesenteric vascular accidents, trauma, and recurrent intestinal obstruction. In the pediatric population, necrotizing enterocolitis, intestinal atresias, and intestinal volvulus are the most common etiologic factors. Other conditions associated with short-bowel syndrome include congenital short small bowel, gastroschisis, and meconium peritonitis. Not all patients with loss of significant amounts of small intestine develop short-bowel syndrome. Important cofactors that help to determine whether the syndrome will develop or not include the premorbid length of small bowel, the segment of intestine that is lost, the age of the patient at the time of bowel loss, the remaining length of small bowel and colon, and the presence or absence of the ileocecal valve.

* Splenic rupture occurs when the spleen is placed under intense pressure/duress, strong enough to tear or separate the outer lining of the organ. A ruptured spleen

accounts for 10% of all abdominal injuries. When a blunt abdominal trauma is present, the spleen is the most frequently and often the only injured organ. A splenic rupture typically results in severe pain and internal bleeding. However, some cases have exhibited only mild symptoms and symptoms may appear delayed as opposed to immediate presentation. The condition is usually caused by a sudden and direct blow to the abdomen, but spontaneous rupture is also possible if the spleen is enlarged or has been enlarged in the past, due to mononucleosis, infection, or chronic excessive consumption of alcohol. Some symptoms are: Right quadrant/left abdominal pain. Left shoulder pain. Severe or mild pain. Rebound tenderness. Muscle guarding. Nausea. Profuse sweating or hot and cold sensations. Abdominal distension or ecchymosis (bruising). Light headedness or syncope (fainting). Fatigue. Low blood pressure. Blurred vision.

* Thrombasthenia is a bleeding disorder that is characterized by prolonged or spontaneous bleeding starting from birth. People with thrombasthenia tend to bruise easily, have frequent nosebleeds (epistaxis), and may bleed from the gums. They may also develop red or purple spots on the skin caused by bleeding underneath the skin (petechiae) or swelling caused by bleeding within tissues (hematoma). Thrombasthenia can also cause prolonged bleeding following injury, trauma, or surgery (including dental work). Women with this condition can have prolonged and sometimes abnormally heavy menstrual bleeding. Affected women also have an increased risk of excessive blood loss during pregnancy and childbirth. About a quarter of individuals with thrombasthenia have bleeding in the gastrointestinal tract, which often occurs later in life. Rarely, affected individuals have bleeding inside the skull (intracranial hemorrhage) or joints (hemarthrosis). The severity and frequency of the bleeding episodes in thrombasthenia can vary greatly among affected individuals, even in the same family. Spontaneous bleeding tends to become less frequent with age.

* Tinea versicolor is a fungal infection of the skin. It's also called pityriasis versicolor and is caused by a type of yeast that naturally lives on your skin. When the yeast grows out of control, the skin disease, which appears as a rash, is the result. The infection can happen for any of the following reasons: You have oily skin. You live in a hot climate. You sweat a lot. You have a weak immune system. Because the yeast grows naturally on your skin, tinea versicolor is not contagious. The condition can affect people of any skin color. It's more likely to affect teens and young adults. Acidic bleach from the growing yeast causes areas of skin to be a different color than the skin around them. These can be individual spots or patches. Specific signs and symptoms of the infection include: Patches that may be white, pink, red, or brown and can be lighter or darker than the skin around them. Spots that do not tan the way the rest of your skin does. Spots that may occur anywhere on your body but are most commonly seen on your neck, chest, back, and arms. The spots may disappear during cool weather and get worse during warm and humid weather. They may be dry and scaly and may itch or hurt, although this is not common.

* Toxocariasis is a rare infection caused by roundworm parasites. It is spread from animals to humans through contact with infected faeces. Roundworm parasites are

most commonly found in cats, dogs and foxes, and usually affect young children. This is because children are more likely to come into contact with contaminated soil when they play and put their hands in their mouths. However, cases have been reported in people of all ages. For most people, an infection with these roundworm larvae causes no symptoms and the parasites die within a few months. However, some people experience mild symptoms, such as: cough, high temperature (fever) of 38C (100.4F) or above, headaches, stomach pain. In rare cases, the roundworm larvae infect organs such as the liver, lungs, eyes or brain and cause severe symptoms, such as: fatigue, loss of appetite or weight loss, skin rashes, wheezing or breathing difficulties, seizures (fits), blurred or cloudy vision, usually only affecting one eye, a very red and painful eye.

* Urea cycle disorders are diseases caused by deficiencies in any of the enzymes or transporters involved in the conversion of ammonia to urea. The absence or abnormal formation of a urea cycle disorder enzyme or transporter protein disrupts the normal function of the urea cycle. The urea cycle is an important process that helps remove waste products, such as ammonia, from the blood stream. Excess levels of ammonia can lead to brain damage and death. The liver produces the six enzymes needed for the urea cycle. Symptoms of urea cycle disorders are caused by elevated ammonia levels in the blood (hyperammonemia). An elevated ammonia level can disrupt normal brain and central nervous system function. Some of the physical symptoms of an elevated ammonia level may include tremor, lack of appetite, irritability, heavy or rapid breathing, low energy, vomiting, disorientation, and combativeness. If the elevated ammonia levels are left untreated and are high enough to reach the central nervous system, the brain and spinal cord may swell, causing irreversible brain damage (encephalopathy), seizures, coma, and death. Signs and symptoms of an elevated ammonia level usually appear early during childhood, but in cases of mild deficiency, the person may not develop symptoms until as late as 40-50 years old. Some common signs of a urea cycle disorder not related to hyperammonemia may include skin lesions, brittle hair, and progressive liver disease.

* Vesicoureteral reflux (VUR) is a condition in which urine flows retrograde, or backward, from the bladder into the ureters/kidneys. In healthy individuals the ureters enter the urinary bladder obliquely and run submucosally for some distance. This, in addition to the ureter's muscular attachments, helps secure and support them posteriorly. Together these features produce a valvelike effect that occludes the ureteric opening during storage and voiding of urine. In people with VUR, failure of this mechanism occurs, with resultant retrograde flow of urine. Most children with vesicoureteral reflux are asymptomatic. In infants, the signs and symptoms of a urinary tract infection may include only fever and lethargy, with poor appetite and sometimes foul-smelling urine, while older children typically present with dysuria and frequent urination. Reflux also increases risk of urinary tract infection or acute pyelonephritis. It has been estimated that VUR is present in more than 10% of the population. Younger children are more prone to VUR because of the relative shortness of the submucosal ureters. This susceptibility decreases with age as the length of the ureters increases as the children grow. In children under the age of 1 year with a urinary tract infection, 70% will have VUR. This number decreases to 15% by the age of 12. Although VUR is more

common in males antenatally, in later life there is a definite female preponderance with 85% of cases being female.

* Wolff-Parkinson-White (WPW) syndrome is a heart condition that causes the heart to beat abnormally fast for periods of time. It's a relatively common condition, affecting between one and three in every 1,000 people. The cause is an extra electrical connection in the heart. This problem with the heart is present at birth (congenital), although symptoms may not develop until later in life. The extra electrical connection is caused by a strand of heart muscle that grows while the unborn baby is developing in the womb. Many cases are diagnosed in otherwise healthy adults aged between 20 and 40. Many people will have no symptoms or only experience occasional, mild episodes of their heart racing. WPW syndrome can sometimes be life-threatening, particularly if it occurs alongside a type of irregular heartbeat called atrial fibrillation. Patients with WPW syndrome experience episodes where the heart suddenly starts racing, before stopping or slowing down abruptly. This rapid heart rate is called supraventricular tachycardia (SVT). Symptoms during an episode are: a pounding or fluttering heartbeat (heart palpitations), feeling light-headed or dizzy, shortness of breath, chest pain, sweating, feeling anxious, finding physical activity exhausting, passing out (fainting). These episodes can last for seconds, minutes or hours. Rarely, they can last for days. How often they occur varies from person to person. Some people may have episodes on a daily basis, while others may only experience them a few times a year. They normally occur randomly, without any identifiable cause, but they can sometimes be triggered by strenuous exercise or drinking a lot of alcohol or caffeine.

* XXY males or Klinefelter syndrome is a chromosomal condition that affects male physical and cognitive development. Its signs and symptoms vary among affected individuals. Affected individuals typically have small testes that do not produce as much testosterone as usual. Testosterone is the hormone that directs male sexual development before birth and during puberty. A shortage of testosterone can lead to delayed or incomplete puberty, breast enlargement (gynecomastia), reduced facial and body hair, and an inability to have biological children (infertility). Some affected individuals also have genital differences including undescended testes (cryptorchidism), the opening of the urethra on the underside of the penis (hypospadias), or an unusually small penis (micropenis). Older children and adults with Klinefelter syndrome tend to be taller than their peers. Compared with unaffected men, adults with Klinefelter syndrome have an increased risk of developing breast cancer and a chronic inflammatory disease called systemic lupus erythematosus. Their chance of developing these disorders is similar to that of women in the general population. Children with Klinefelter syndrome may have learning disabilities and delayed speech and language development. They tend to be quiet, sensitive, and unassertive, but personality characteristics vary among affected individuals.

1.1.26 RTS-18

https://archive.org/details/Resonant_Therapy_Sessions_18

Aicardi Syndrome; Angiokeratoma Corporis Diffusum; Arachnoid Cysts; Bardet-Biedel Syndrome; Branchio-Oculo-Facial Syndrome; Burkitt Lymphoma; Cancer-Ewings (PNET); Cancer-Germ Cell; Cancer-Merkel Cell; Cancer-Soft Tissue Sarcoma; Catheterization; Chlamydiaceae Infections; Creutzfeldt-Jakob New Variant; Cryptogenic Pneumonia; Dysplasia Arteriohepatic; Encephalitis Epidemic; Ependymoma; Filarioidea Infections; Glossopharyngeal Neuralgia; Goodpasture Syndrome; Guinea Worm Infection; Hemangioma Cavernous; Hermanski-Pudlak Syndrome; Hypercapnia; Influenza Avian-H5N1; Jaundice Chronic Idiopathic; Kernicterus; Lassa Fever; Loiasis; Mannosidosis Alpha; Monkeypox; Monosomy; Nephroblastoma; Neuromyelitis Optica; Oculomotor Paralysis; Ostomy; Phlebotomus Fever; Polychondritis Relapsing; Pseudomelia; Pseudoxanthoma Elasticum; Pulmonary Atresia; Purpura Thrombotic Thrombocytopenic; Rachitis; Retinoblastoma; Rickettsia Infections; Roseola Infantum; Rubella; Samter Syndrome; Schistosomiasis; Scrub Typhus; Sexual Disorders (General); Sialidosis; Syphilis Congenital; Thromboangiitis Obliterans; Thymoma; Tularemia; Turner Syndrome; Urogenital; West Nile Fever; Xeroderma Pigmentosum

* Aicardi syndrome is an extremely rare genetic disorder. Almost all people with Aicardi syndrome are females. Individuals with Aicardi syndrome have agenesis of the corpus callosum, chorioretinal lacunae and seizures. Agenesis of the corpus callosum means that the structure that connects the right half of the brain with the left half of the brain (corpus callosum) does not develop normally. Chorioretinal lacunae are small holes in the retina (back part of the eye). These are only visible to a doctor using a device to look into the back of the eye. It is very unusual (maybe impossible) to have Aicardi syndrome without having chorioretinal lacunae. The seizures can be of different types. Infants with Aicardi syndrome usually have a type of seizures known as "infantile spasms". These are single jerks of the whole body. They may happen many times a day. Infants are usually awake during infantile spasms. These look different from the more common type of seizures known as "generalized tonic-clonic" seizures. Generalized tonic-clonic seizures are rhythmic jerking of arms and legs. People often black out during this type of seizure. Children with Aicardi syndrome usually grow out of infantile spasms and then have generalized tonic-clonic or other types of seizures. Other parts of the brain also do not develop normally. These brain malformations cause frequent seizures and intellectual disability.

* Angiokeratoma corporis diffusum is a clinical variant of angiokeratoma that is typically caused by a deficiency of the lysosomal enzyme alpha-galactosidase. Angiokeratomas are hyperkeratotic papules that are characterized histologically by superficial ectatic vessels with epidermal proliferation. They occur clinically as 1 of 5 different subtypes. Angiokeratoma corporis diffusum (ACD) occurs most typically on the lower region of the trunk, buttocks, and thighs. Angiokeratoma corporis diffusum occurs in several other diseases related to deficiencies of enzymes that are involved in the metabolism of glycoproteins, including fucosidosis, sialidosis, mannosidosis, GM1 gangliosidosis, and

Kanzaki disease. Very rarely, ACD has been reported in patients with normal enzyme activity. Angiokeratoma corporis diffusum (Fabry disease) is rare; the estimated incidence is 1 case per 40,000 population. Most occurrences of angiokeratoma corporis diffusum (Fabry disease) are in whites. Because angiokeratoma corporis diffusum (Fabry disease) is an X-linked recessive disease, only men are fully afflicted. Heterozygous women, in addition to transmitting the condition, may develop symptoms. In males, signs and symptoms of angiokeratoma corporis diffusum (Fabry disease) begin in late childhood or adolescence.

* Arachnoid cysts are cysts, not tumors. They are fluid-filled sacs that develop between the brain/spinal cord and a membrane called the arachnoid membrane, one of three membranes that cover the brain and spinal cord. If the arachnoid membrane splits or tears, it can trap cerebrospinal fluid – the fluid that surrounds and protects the brain from damage. The cysts grow as more fluid becomes trapped. Symptoms vary depending on the size and location of the arachnoid cyst and can go undetected for years. Small cysts – and even many large ones – often exist without causing symptoms. However, if the cyst grows large enough it can put pressure on surrounding parts of the brain and spinal cord, resulting in the onset of symptoms. Most common symptoms include: Headaches. Nausea and/or vomiting. Seizures. Behavioral changes. Hearing and vision problems. Vertigo. Balance problems while walking or standing. Weakness or paralysis on one side of the body.

* Bardet-Biedl syndrome is an inherited disease that causes vision problems, kidney abnormalities, genital anomalies, extra fingers or toes, and mild obesity, among other symptoms. About half of people with the disease have developmental delay or mental disability. One hallmark of the disease is a vision problem caused by degeneration of the retina. It begins as night blindness in childhood and progresses to a loss of peripheral vision. People with Bardet-Biedl syndrome can also lose central vision during childhood or adolescence. Around half of people with the disease have developmental disabilities. This can range from mild learning disabilities or delayed emotional development to severe mental disability. In some cases these delays are due in part to vision loss, while in other cases they are a direct result of the disease. Commonly, people with Bardet-Biedl syndrome have extra fingers and/or toes and mild obesity. Males with the disease often have small genitalia. Women with the disease typically have irregular menstrual cycles and may have structural deformities of the vagina. Some also have diabetes.

* Branchio-oculo-facial syndrome (BOFS) is characterised by low birth weight and growth retardation, bilateral branchial clefts that may be hemangiomatous, sometimes with linear skin lesions behind the ears ('burn-like' lesions), congenital strabismus, obstructed nasolacrimal ducts, a broad nasal bridge with a flattened nasal tip, a protruding upper lip with an unusually broad and prominent philtrum, and full mouth.

* Burkitt’s lymphoma is a rare and aggressive form of non-Hodgkin lymphoma. Non-Hodgkin lymphoma is a type of cancer of the lymphatic system, which helps the body fight infections. Burkitt’s lymphoma is most common in children living in sub-Saharan

Africa, where it's related to the Epstein-Barr virus (EBV) and chronic malaria. Burkitt's lymphoma is also seen elsewhere, including the United States. Outside of Africa, Burkitt's lymphoma is most likely to occur in people who have a compromised immune system. Burkitt's lymphoma can cause fever, weight loss, and night sweats. Other symptoms of Burkitt's lymphoma vary according to type. The symptoms of sporadic Burkitt's lymphoma include: abdominal swelling, distortion of facial bones, night sweats, intestinal obstruction, an enlarged thyroid, enlarged tonsils. The symptoms of endemic Burkitt's lymphoma include swelling and distortion of facial bones and a rapid growth of lymph nodes. The enlarged lymph nodes are non-tender. Tumors can grow extremely quickly, sometimes doubling their size within 18 hours. The symptoms of HIV-related lymphoma are similar to those of the sporadic type.

* Catheterization is the process of inserting a catheter. A catheter is a thin tube made from medical grade materials serving a broad range of functions. Catheters are medical devices that can be inserted in the body to treat diseases or perform a surgical procedure. By modifying the material or adjusting the way catheters are manufactured, it is possible to tailor catheters for cardiovascular, urological, gastrointestinal, neurovascular, and ophthalmic applications. Catheters can be inserted into a body cavity, duct, or vessel. Functionally, they allow drainage, administration of fluids or gases, access by surgical instruments, and also perform a wide variety of other tasks depending on the type of catheter.

* Chlamydiaceae are Gram-negative obligate intracellular bacteria. They are responsible for a broad range of diseases in animals and humans. Chlamydiaceae primary replicate in mucosal epithelial cells of the conjunctivae, the respiratory, urogenital and gastrointestinal tract. They can survive and replicate in monocytes and macrophages and are characterized by distinct extracellular and intracellular forms.

* New variant Creutzfeldt - Jakob Disease in humans is thought to be caused by prions, which encourage conformational changes of proteins. This evolutionary process is problematic because it promotes the refolding of native proteins into the diseased state, or in other words - from alpha-helices into beta-pleated sheets. When these amyloid proteins accumulate in organs and tissues, the misfolded hydrophobic proteins are not always dissolved by proteolysis. When the exponential increase of these diseased conformations of proteins occurs, the cells are no longer able to function properly, and eventually die off. Once a prion is transmitted, it begins the "self-sustaining feedback loop" which causes the disease to progress. As the diseased proteins die off, it causes the spongy deterioration of the brain and spinal cord, leading to an array of symptoms that are incurable, irreversible, and eventually fatal. Patients diagnosed with nvCJD are usually diagnosed at a young age, with the disease lasting approximately 12-14 months. Symptoms affect both the physical and mental capacity of patients leading to rapidly progressing dementia, irritability, mood swings, muscle jerks, loss of sight, and eventually the inability to speak along with the loss of all motor function, resulting in death.

* Cryptogenic organizing pneumonia (COP) is an idiopathic condition in which

granulation tissue obstructs alveolar ducts and alveolar spaces with chronic inflammation occurring in adjacent alveoli. COP, a form of idiopathic interstitial pneumonia, affects men and women equally, usually in their 40s or 50s. Cigarette smoking does not seem to be a risk factor. About one half of patients recall having a community-acquired pneumonia-like syndrome (ie, a nonresolving flu-like illness characterized by cough, fever, malaise, fatigue, and weight loss) at the onset of the illness. It has symptoms that can closely mimic a pneumonia infection, such as fever, tiredness, coughing and breathlessness.

* Dysplasia Arteriohepatic or Alagille syndrome (ALGS) is a complex multisystem disorder involving primarily the liver, heart, eyes, face, and skeleton. The clinical features are highly variable, even within families. The major clinical manifestations of ALGS are cholestasis, characterized by bile duct paucity on liver biopsy; congenital cardiac defects, primarily involving the pulmonary arteries; posterior embryotoxon in the eye; typical facial features; and butterfly vertebrae. Renal and central nervous abnormalities also occur. Mortality is approximately 10%, with vascular accidents, cardiac disease, and liver disease accounting for most of the deaths.

* Encephalitis epidemic, also Encephalitis lethargica, is a disease characterized by high fever, headache, double vision, delayed physical and mental response, and lethargy. In acute cases, patients may enter coma. Patients may also experience abnormal eye movements, upper body weakness, muscular pains, tremors, neck rigidity, and behavioral changes including psychosis. The cause of encephalitis lethargica is unknown. Between 1917 to 1928, an epidemic of encephalitis lethargica spread throughout the world, but no recurrence of the epidemic has since been reported. Postencephalitic Parkinson's disease may develop after a bout of encephalitis-sometimes as long as a year after the illness.

* Ependymoma is a tumor that develops in the central nervous system. It forms from the epndymal cells. The ependymoma tumor is slow growing, so the signs and symptoms usually take time to show; it can sometimes take months. One of the top symptoms of ependymoma is an increased pressure inside the skull, also known as intracranial pressure. This is due to blockage in the ventricles, which is a space in the brain that is filled with fluid. The cerebral spinal fluid is what protects the brain and spinal cord, so when the tumor increases pressure in that area, it can cause swelling. When this happens, signs like headaches, sickness / vomiting and changes in sight will be shown. Other symptoms include swelling in the nerves located in the back of the eye, neck pain, irritability, rapid and jerky eye movements. Seizures and changes in behavior have also been noted as symptoms of ependymoma.

* Filarioidea infections cause disease conditions generically known as filariasis. Species within the Filarioidea superfamily are known as filarial worms or filariae (singular "filaria"). Filarioidea all are specialised parasites and the definitive host is always a vertebrate, a mammal, bird, reptile or amphibian, but not a fish. The intermediate host is always an Arthropod. Most of Filarioidea parasitise wild species, birds in particular, but some, especially in the family Onchocercidae, attack mammals, including humans and

some domestic animals. Conditions that result from parasitism by Onchocercidae include some of the most troublesome diseases of the warmer regions, including river blindness and elephantiasis. Humankind is the definitive host of at least nine species of filariae in various families. Some of these mainly occupy lymph vessels and cause conditions such as adenolyrophangitis, elephantiasis, and filarial fever. Others may cause loiasis, streptocerciasis, cutaneous onchocerciasis, river blindness or other less serious pathogenic conditions.

* Glossopharyngeal neuralgia consists of recurring attacks of severe pain in the back of the throat, the area near the tonsils, the back of the tongue, part of the ear, and/or the area under the back of the jaw. The pain is due to malfunction of the 9th cranial nerve (glossopharyngeal nerve) The glossopharyngeal nerve helps move the muscles of the throat and carries information from the throat, tonsils, and tongue to the brain. In glossopharyngeal neuralgia, attacks are brief and occur intermittently, but they cause excruciating pain. Attacks may be triggered by a particular action, such as chewing, swallowing, talking, yawning, coughing, or sneezing. The pain usually begins at the back of the tongue or back of the throat. Sometimes pain spreads to the ear or the area at the back of the jaw. The pain may last several seconds to a few minutes and usually affects only one side of the throat and tongue. The cause is often unknown but sometimes is an abnormally positioned artery that puts pressure on (compresses) the glossopharyngeal nerve. Glossopharyngeal neuralgia, a rare disorder, usually begins after age 40 and occurs more often in men. Often, its cause is unknown.

* Goodpasture syndrome is a rare and potentially life-threatening autoimmune disease. It occurs when the immune system mistakenly attacks the basement membrane in lungs and kidneys, leading to bleeding from the lungs and kidney failure. The antiglomerular basement membrane (GBM) antibodies primarily attack the kidneys and lungs, although, generalized symptoms like malaise, weight loss, fatigue, fever, and chills are also common, as are joint aches and pains. 60 to 80% of those with the condition experience both lung and kidney involvement; 20-40% have kidney involvement alone, and less than 10% have lung involvement alone. Lung symptoms usually antedate kidney symptoms and usually include: coughing up blood, chest pain (in less than 50% of cases overall), cough, and shortness of breath. Kidney symptoms usually include blood in the urine, protein in the urine, unexplained swelling of limbs or face, high amounts of urea in the blood, and high blood pressure.

* Guinea worm disease is caused by drinking water contaminated by water fleas (microscopic arthropods known as copepods) that host the Dracunculus larva. Guinea worm disease used to thrive in some of the world’s poorest areas, particularly those with limited or no access to clean water. Once inside the body, stomach acid digests the water flea, but not the guinea worm larvae that are sheltered inside. These larvae find their way to the body cavity where the female mates with a male guinea worm. This takes place approximately three months after infection. The male worm dies after mating and is absorbed. The female, which contains larvae, burrows into the deeper connective tissues or adjacent to long bones or joints of the extremities. Approximately one year after the infection began, the worm creates a blister in the human host’s skin—

usually on the leg or foot. Within 72 hours the blister ruptures, exposing one end of the emergent worm. This blister causes a very painful burning sensation as the worm emerges. Infected persons often immerse the affected limb in water to relieve the burning sensation. Once the blister or open sore is submerged in water, the adult female releases hundreds of thousands of guinea worm larvae, contaminating the water supply.

* Cavernous hemangioma, also called cavernous angioma, cavernoma, or cerebral cavernous malformation (CCM) (when referring to presence in the brain) is a type of blood vessel malformation or hemangioma, where a collection of dilated blood vessels form a benign tumor. Because of this malformation, blood flow through the cavities, or caverns, is slow. Additionally, the cells that form the vessels do not form the necessary junctions with surrounding cells. Also, the structural support from the smooth muscle is hindered, causing leakage into the surrounding tissue. It is the leakage of blood, known as a hemorrhage from these vessels that causes a variety of symptoms known to be associated with this disease. Symptoms vary according to the location.

* Hermansky-Pudlak syndrome is a disorder characterized by a condition called oculocutaneous albinism, which causes abnormally light coloring (pigmentation) of the skin, hair, and eyes. Affected individuals typically have fair skin and white or light-colored hair. People with this disorder have a higher than average risk of skin damage and skin cancers caused by long-term sun exposure. Oculocutaneous albinism reduces pigmentation of the colored part of the eye (iris) and the light-sensitive tissue at the back of the eye (retina). Reduced vision, rapid and involuntary eye movements (nystagmus), and increased sensitivity to light (photophobia) are also common in oculocutaneous albinism. In Hermansky-Pudlak syndrome, these vision problems usually remain stable after early childhood. People with Hermansky-Pudlak syndrome also have problems with blood clotting (coagulation) that lead to easy bruising and prolonged bleeding. Some individuals with Hermansky-Pudlak syndrome develop breathing problems due to a lung disease called pulmonary fibrosis, which causes scar tissue to form in the lungs. The symptoms of pulmonary fibrosis usually appear during an individual's early thirties and rapidly worsen. Other, less common features of Hermansky-Pudlak syndrome include inflammation of the large intestine (granulomatous colitis) and kidney failure.

* Hypercapnia is increased CO2 levels as well as high CO2. Those individuals who suffer with COPD or other respiratory diseases have problems moving air into and out of the lung. This simply means that it is difficult for their lungs to exchange oxygen for carbon dioxide, which is an essential process of the overall process of breathing. Carbon dioxide in the blood can lead to low levels of oxygen in the blood which is referred to as hypoxemia also with the high levels of carbon dioxide– or hypercapnia. Hypercapnia develops rather slowly over time and is very mild to the extent of not even showing any symptoms at all. When symptoms do develop they might initially include: Headache, Inability to think straight, Drowsiness or sleepiness. Symptoms of more severe hypercapnia can eventually lead to what is known as “respiratory failure” as well as possible death, and these late symptoms include: Skin that is flushed, Rapid breathing, Dizziness, Blood pressure increase, Heart rate increase, Muscle twitches.

The causes can be many ranging from lungs being in bad shape due to smoking or breathing chemical at a job to some predisposed condition where problems with lungs are genetic. All it really means is that for some reason the lungs are damaged so the individual is not able to inhale or exhale fully so that not enough oxygen reaches the blood system and instead there is gradually a built up of CO2. Other examples of conditions that can lead to hypercapnia include: Drug overdose, Seizures, Skeletal muscle that are weak, Lesions of the brainstem, Obstructive sleep apnea, Asthma.

* H5N1 is a type of influenza virus that causes a highly infectious, severe respiratory disease in birds called avian influenza (or "bird flu"). Human cases of H5N1 avian influenza occur occasionally, but it is difficult to transmit the infection from person to person. When people do become infected, the mortality rate is about 60%. Almost all cases of H5N1 infection in people have been associated with close contact with infected live or dead birds, or H5N1-contaminated environments. The virus does not infect humans easily, and spread from person to person appears to be unusual. There is no evidence that the disease can be spread to people through properly prepared and thoroughly cooked food. The symptoms of H5N1 infection may include fever (often high fever, > 38°C) and malaise, cough, sore throat, and muscle aches. Other early symptoms may include abdominal pain, chest pain and diarrhoea. The infection may progress quickly to severe respiratory illness, difficulty breathing or shortness of breath, pneumonia, Acute Respiratory Distress Syndrome and neurologic changes (altered mental status or seizures).

* Jaundice Chronic Idiopathic or Dubin-Johnson syndrome is a condition characterized by jaundice, which is a yellowing of the skin and whites of the eyes. In most affected people jaundice appears during adolescence or early adulthood, although a few individuals have been diagnosed soon after birth. Jaundice is typically the only symptom of Dubin-Johnson syndrome, but some people also experience weakness, mild upper abdominal pain, nausea, and/or vomiting.

* Kernicterus is a very rare type of brain damage that occurs in a newborn with severe jaundice. It happens when a substance in the blood, called bilirubin, builds up to very high levels and spreads into the brain tissues. This causes permanent brain damage. Kernicterus may be prevented by treating jaundice early before it gets severe. Kernicterus is caused by a high level of bilirubin in a baby's blood. If left untreated, the bilirubin can then spread into the brain, where it causes long-term damage. A low-level buildup of bilirubin is normal. This is called mild jaundice, and it gives a newborn a slightly yellowish tint to the skin and sometimes the eyes. Kernicterus has likely already started if a baby has certain symptoms, including: Extreme sleepiness and lethargy. This means a baby is difficult to wake up from sleep or can't be kept awake. But keep in mind that newborn babies sleep a lot. Lethargy in a newborn is easy to confuse with normal newborn behavior. A lethargic baby does not eat well, does not respond to touching or does not startle from sudden movements, and never seems to fully wake up. A very high-pitched cry that does not sound normal. Poor muscle tone. The baby may seem "floppy" and weak. Sometimes this is followed by periods when the baby's muscles flex in a way that is not normal. The baby may be stiff and arch his or her back

and head. A fever that occurs along with any of these other symptoms.

* Lassa fever is an acute viral illness that occurs in west Africa. The virus, a member of the virus family Arenaviridae, is a single-stranded RNA virus and is zoonotic, or animal-borne. Transmission of Lassa virus to humans occurs most commonly through ingestion or inhalation. Mastomys rodents shed the virus in urine and droppings and direct contact with these materials, through touching soiled objects, eating contaminated food, or exposure to open cuts or sores, can lead to infection. Mild symptoms include slight fever, general malaise and weakness, and headache. In 20% of infected individuals, however, disease may progress to more serious symptoms including hemorrhaging (in gums, eyes, or nose, as examples), respiratory distress, repeated vomiting, facial swelling, pain in the chest, back, and abdomen, and shock. Neurological problems have also been described, including hearing loss, tremors, and encephalitis. Death may occur within two weeks after symptom onset due to multi-organ failure.

* Loiasis is caused by the Loa loa, a thread-like worm that lives under the skin in the subcutaneous fat. Because it is often spotted migrating in the eye, it is known as the eye worm. Loiasis is endemic to 11 countries and 12 million Africans are infected. Loiasis is carried by day-biting deer and mango flies (Chrysops silacea and Chrysops dimidiata). Loiasis can be asymptomatic. Native people are more likely to have symptoms than tourists. Adult worms (both living and dead) and their metabolic byproducts (waste) can cause localized subcutaneous itching and allergic reactions. The inflammation may cause red skin eruptions and swelling in the deeper layers of the skin which can last many weeks. Migrating adults can cause instant pain, when moving in sensitive areas, for example, across the surface of the eye. Loiasis is often the cause of eosinophilia (large quantities of eosinophil granulocytes, white cells, that use antigens and special proteins to fight against foreign organisms such as parasites.). Other symptoms that may occur: arthritis (joint pain), colonic lesion (damaged large intestine), inflammation, swelling and accumulation of fluid in testicles, lymphadenitis (infection of the lymph glands), membranous glomerulonephritis (kidney disease), peripheral neuropathy (damaged peripheral nervous system), retinopathy (damaged retina (thin layer on the back wall of the eye)).

* Alpha-mannosidosis is an autosomal recessive lysosomal storage disease characterized by mental retardation, coarse facial features, skeletal abnormalities, hearing impairment, neurologic motor problems, and immune deficiency. Expression of the disease varies considerably, and there is a wide spectrum of clinical findings and severity. Affected children are often normal at birth and during early development. They present in early childhood with delayed psychomotor development, delayed speech, and hearing loss. Additional features include large head with prominent forehead, rounded eyebrows, flattened nasal bridge, macroglossia, widely spaced teeth, dysostosis multiplex, and motor impairment. Lysosomes are particles bound in membranes within cells that function as the primary digestive units within cells. Enzymes within lysosomes break down or digest particular nutrients, such as complex molecules composed of a sugar attached to a protein (glycoproteins). Low levels or inactivity of the alpha-mannosidase enzyme leads to the abnormal accumulation these

compounds in the cells of affected individuals with unwanted consequences.

* Monkeypox was first discovered in 1958 when two outbreaks of a pox-like disease occurred in colonies of monkeys kept for research, hence the name ‘monkeypox.’ The first human case of monkeypox was recorded in 1970 in the Democratic Republic of Congo during a period of intensified effort to eliminate smallpox. Since then monkeypox has been reported in humans in other central and western African countries. Human monkeypox was originally described in Africa, where it is typically characterized by initial fever, chills, headache, marked lymphadenopathy and back pain, followed by a monomorphic eruption consisting of macules and papules in a centrifugal distribution with subsequent vesicles, pustules and crusting. In a review of 34 patients with confirmed US monkeypox infection, most patients experienced rash, fever, chills and lymphadenopathy. Skin lesions were typically monomorphic and involved the extremities, head and neck, chest, back, and palms. The majority of patients (80%) had 5-100 lesions, and almost half of the patients had lesions in a centrifugal distribution. The most common lesions included papules, vesicles, pustules, umbilicated lesions and macules.

* Monosomy is a genetic defect caused by an incomplete set of chromosomes. Various medical conditions are caused by monosomy, some more severe than others. In complete monosomy, one side of a chromosome pair is simply missing. One example of this type of monosomy is Turner Syndrome, where the X chromosome is missing a complementary chromosome. A number of developmental disabilities are caused by Turner Syndrome, including severe problems like congenital heart disease. However, it is also possible for patients to have a perfectly healthy life with the condition, as long as it is well managed. Sometimes, part of a pairing chromosome is transferred, causing partial monosomy. In this case, missing genetic information can cause an assortment of problems, including Le Jeune's Syndrome, the result of partial monosomy on chromosome 5. The syndrome is characterized by a number of symptoms, particularly a malformed larynx which causes the voice of the patient to sound strangely high pitched. Developmental disabilities may also be present.

* Nephroblastoma, also called Wilms’ tumor, is a rare type of kidney cancer that primarily affects children. Although rare, Wilms’ tumor is the most common type of kidney cancer in children, and the fourth most common type of childhood cancer overall. In Wilms tumor, one or more tumors may be found in one or both kidneys. Wilms tumor may spread to the lungs, liver, bone, brain, or nearby lymph nodes. Children with Wilms’ tumor might display the following symptoms: constipation, abdominal pain, swelling, or discomfort, a lump in the abdomen, nausea and vomiting, weakness and fatigue, loss of appetite, a fever for no reason, blood in their urine or discoloration of their urine, high blood pressure, which may cause chest pain, shortness of breath, and headaches, increased and uneven growth of one side of their body. Many children with Wilms’ tumor also have birth defects.

* Neuromyelitis optica (NMO) is an uncommon disease syndrome of the central nervous system (CNS) that affects the optic nerves and spinal cord. Individuals with NMO

develop optic neuritis, which causes pain in the eye and vision loss, and transverse myelitis, which causes weakness, numbness, and sometimes paralysis of the arms and legs, along with sensory disturbances and loss of bladder and bowel control. NMO leads to loss of myelin, which is a fatty substance that surrounds nerve fibers and helps nerve signals move from cell to cell. The syndrome can also damage nerve fibers and leave areas of broken-down tissue. In the disease process of NMO, for reasons that aren't yet clear, immune system cells and antibodies attack and destroy myelin cells in the optic nerves and the spinal cord.

* Oculomotor nerve palsy or third nerve palsy is an eye condition resulting from damage to the third cranial nerve or a branch thereof. As the name suggests, the oculomotor nerve supplies the majority of the muscles controlling eye movements. Thus, damage to this nerve will result in the affected individual being unable to move his or her eye normally. In addition, the nerve also supplies the upper eyelid muscle and the muscles responsible for pupil constriction. The limitations of eye movements resulting from the condition are generally so severe that the affected individual is unable to maintain normal alignment of their eyes when looking straight ahead, leading to strabismus and, as a consequence, double vision (diplopia).

* Ostomy is a surgical procedure creating an opening in the body for the discharge of body wastes. Certain diseases of the bowel or urinary tract involve removing all or part of the intestine or bladder. This creates a need for an alternate way for feces or urine to leave the body. An opening is surgically created in the abdomen for body wastes to pass through. The surgical procedure is called an ostomy. The opening that is created at the end of the bowel or ureter is called a stoma, which is pulled through the abdominal wall.

* Phlebotomus fever is a vector-borne febrile arboviral infection caused by three serotypes of Phlebovirus. It occurs in the subtropical zone of the Eastern Hemisphere between 20°N and 45°N, particularly in Southern Europe, North Africa, the Balkans, Eastern Mediterranean, Iraq, Iran, Pakistan, Afghanistan and India. The disease is transmitted by the bites of phlebotomine sandflies of the Genus Phlebotomus, in particular, Phlebotomus papatasi, Phlebotomus perniciosus and Phlebotomus perfiliewi. The sandfly becomes infected when biting an infected human in the period between 48 hours before the onset of fever and 24 hours after the end of the fever, and remains infected for its lifetime. Besides this «horizontal» virus transmission from man to sandfly, the virus can be transmitted in insects transovarially, from an infected female sandfly to its offspring. A few days after the infective bite, a feeling of lassitude, abdominal distress and chills develop followed by fever of 39 °C to 40 °C, severe frontal headaches, muscle and joint aches, flushing of the face and a fast heart rate. After two days the fever begins to subside and the temperature returns to normal. Fatigue, a slow heart rate and low blood pressure may persist from few days to several weeks but complete recovery is the rule.

* Polychondritis relapsing is a rare disease in which cartilage in many areas of the body becomes inflamed. Cartilages that may develop inflammation at various times include

nose, ears, joints, windpipe and spine. The heart, blood vessels and eye that all have a biochemical composition that is similar to cartilage, may also be affected. Note that early involvement of the throat is usually severe and can be life threatening. An emergency tracheostomy may be needed due to obstruction of the airway. Inflammation of the joints is known as arthritis and causes pain, stiffness of all the joints in the knees, hands, wrist, ankles as well as feet. With the eye inflammation, it can either be mild to severe and may damage the vision. Cataracts may be triggered by the inflammation. Other areas of tissues that may develop inflammation can include the aorta (leads to aortic valve weakness or aneurysm), tissues around or in the heart (leads to myocarditis and pericarditis), and the skin and the nerves from the brain, (leads to cranial nerve palsies). The cause is not known, and it occurs most often in people in their 50s or 60s.

* Pseudomelia is the perception of painful and nonpainful phantom sensations that occur following the complete or partial loss of a limb. The majority of individuals with an amputated extremity will experience the impression that the limb is still present, and in many cases, painful.

* Pseudoxanthoma elasticum (PXE) is a progressive disorder that is characterized by the accumulation of deposits of calcium and other minerals (mineralization) in elastic fibers. Elastic fibers are a component of connective tissue, which provides strength and flexibility to structures throughout the body. In PXE, mineralization can affect elastic fibers in the skin, eyes, and blood vessels, and less frequently in other areas such as the digestive tract. People with PXE may have yellowish bumps called papules on their necks, underarms, and other areas of skin that touch when a joint bends (flexor areas). They may also have abnormalities in the eyes, such as a change in the pigmented cells of the retina (the light-sensitive layer of cells at the back of the eye) known as peau d'orange. Another eye abnormality known as angioid streaks occurs when tiny breaks form in the layer of tissue under the retina called Bruch's membrane. Bleeding and scarring of the retina may also occur, which can cause vision loss. Mineralization of the blood vessels that carry blood from the heart to the rest of the body (arteries) may cause other signs and symptoms of PXE. For example, people with this condition can develop narrowing of the arteries (arteriosclerosis) or a condition called claudication that is characterized by cramping and pain during exercise due to decreased blood flow to the arms and legs. Rarely, bleeding from blood vessels in the digestive tract may also occur.

* Pulmonary atresia is a congenital heart defect in which the pulmonary valve of the infant is missing. The pulmonary valve regulates the flow of blood from the right ventricle in the heart to the lungs, taking blood low in oxygen and passing it on to the lungs to make it oxygen rich. In an infant born with pulmonary atresia, the pulmonary valve does not develop. Instead, a solid sheet of tissue exists where the valve should be. This effectively blocks the flow of blood. As a result of this birth defect, the infant suffers from a lack of oxygen-rich blood, which can be fatal. Noticeable symptoms in a newborn with pulmonary atresia can become evident within a few hours of birth or they may be delayed for several days, depending on the type and severity of the condition. The symptoms could include: Cyanosis or bluish gray tinged skin, lips or nails.

Shortness of breath or quick breathing. Getting tired easily or being lethargic. Not feeding well or getting fatigued while nursing. Clammy and sweaty skin that is cool to the touch. A number of complications may arise from this condition. The baby will be at risk for seizures, strokes, or heart failure. The baby may also experience delayed growth and development, or infectious endocarditis. It is imperative that pulmonary atresia is identified as soon as possible for the baby to survive. If not treated the condition will prove fatal.

* Thrombotic thrombocytopenic purpura (TTP) is a rare disorder that affects blood's tendency to clot. In this disease, tiny clots form throughout the body. These tiny clots have major consequences. The tiny clots can block blood vessels. This stops blood from being able to reach the organs. This can compromise the functioning of vital organs, such as the heart, brain, and kidneys. The tiny clots can also use up too many of the blood's platelets. The blood might then be unable to form clots when it needs to form them. For example, in case of injury, bleeding may unstoppable. The symptoms of TTP are: Bruises that are purplish in color and have no obvious cause. These marks, called purpura, are part of what gives this condition its name. Tiny red or purple spots that might look like a rash. The skin may turn yellowish, which is called jaundice. The skin may look pale. Other symptoms are: fever, fatigue, confusion, weakness, headache. In very serious cases, a stroke, major internal bleeding, or a coma can occur.

* Rachitis, also rickets, is a skeletal disorder that's caused by a lack of vitamin D, calcium, or phosphate. These nutrients are important for the development of strong, healthy bones. People with rickets may have weak and soft bones, stunted growth, and, in severe cases, skeletal deformities. Rickets is most common in children who are between 6 and 36 months old. Children are at the highest risk of rickets because they're still growing. Children might not get enough vitamin D if they live in a region with little sunlight, follow a vegetarian diet, or don't drink milk products. In some cases, the condition is hereditary. Symptoms of rickets include: Pain or tenderness in the bones of the arms, legs, pelvis, or spine. Stunted growth and short stature. Bone fractures. Muscle cramps. Teeth deformities. Skeletal deformities.

* Retinoblastoma is a disease in which malignant (cancer) cells form in the tissues of the retina. The retina is the nerve tissue that lines the inside of the back of the eye. The retina senses light and sends images to the brain by way of the optic nerve. Although retinoblastoma may occur at any age, it occurs most often in children younger than 2 years. The cancer may be in one eye (unilateral) or in both eyes (bilateral). Retinoblastoma rarely spreads from the eye to nearby tissue or other parts of the body. Signs and symptoms of retinoblastoma include "white pupil" and eye pain or redness. These and other signs and symptoms may be caused by retinoblastoma or by other conditions: Pupil of the eye appears white instead of red when light shines into it. This may be seen in flash photographs of the child. Eyes appear to be looking in different directions (lazy eye). Pain or redness in the eye. Infection around the eye. Eyeball is larger than normal. Colored part of the eye and pupil look cloudy.

* The Rickettsiae are a diverse group of bacteria some of which can be transmitted to

humans via the bites of fleas, lice, ticks or mites. Rickettsiae are usually injected directly from the saliva of ticks and mites as they feed on humans and, in the case of fleas, by contamination of bite sites by faeces. There is great variation in the range and severity of symptoms experienced. Commonly a small, hard, black sore (called an eschar) first appears at the bite site where the infection was introduced. Other typical symptoms may include: fever, headache, muscle aches, swollen lymph glands, cough, rash. Less common severe infections can be associated with confusion and breathing difficulties. The diseases caused by rickettsial infections are alike in many ways. Rocky Mountain spotted fever, typhus, ehrlichiosis, and Q fever all have similar symptoms, including headache, high fever, and sometimes a rash.

* Roseola infantum is a disease caused by human herpes virus type 6B (HHV-6B) and possibly type 7 (HHV-7). Roseola is characterised by high fever lasting for 3–5 days, runny nose, irritability and tiredness. As the fever subsides a rash (exanthem) may appear on the face and body. Roseola is most commonly seen in children between 6 months and 3 years of age. Most children (86%) will have had roseola by the age of 1 year. Roseola is rarely seen in adults, as infection during childhood probably confers lifelong immunity to the disease. Repeat attacks have been known to occur but are not common. Roseola is spread from person to person via saliva of asymptomatic family members. The incubation period for roseola is approximately 9–10 days after exposure. In many cases of roseola, the child appears well with few or no signs or symptoms. Typical cases are characterised by the following: High fever (often up to 40 C) for 3–5 days. Upper respiratory symptoms such as sore throat, cough, runny nose or congestion. Irritability and tiredness. Rash appears around days 3 to 5, as fever subsides. In some cases, a child may be infected with the virus and never develop the rash. Less commonly, the rash may appear without a preceding fever. In most cases, particularly if fever is low, the child is well. In about 5–15% of young children, high fevers may trigger febrile seizures.

* Rubella is a viral illness that causes a skin rash and joint pain. A rubella infection is mild for most people, but it can have catastrophic consequences for an unborn baby. If a pregnant woman contracts rubella, her baby is at risk of severe and permanent birth defects or death. Rubella is sometimes called German measles, but rubella is a different viral disease to measles. About half of rubella cases are so mild that there are no symptoms. If symptoms do occur, they usually appear between two and three weeks after infection. Some of the signs and symptoms of rubella may include: mild fever, headache, runny nose, sore eyes, skin rash, swollen lymph nodes, joint pain. Rubella is a mild illness compared to measles and most people recover within about three days. Possible complications of rubella include: arthralgia – lingering joint pain that may take a month or more to get better, otitis media – inflammation of the middle ear, encephalitis – inflammation of the brain, which can be fatal in some cases. Rubella is most commonly spread when someone ingests (swallows) or inhales the cough or sneeze droplets from an infected person. Infants with CRS shed the rubella virus in their nose and throat secretions and in their urine for months or even years. Symptoms occur usually between 14 to 17 days (and up to 21 days). People infected with rubella are infectious for approximately one week before, and for at least four days after, the onset of the

rash.

* Samter's syndrome (or Samter's triad) is a condition that consists of the following three symptoms: asthma, nasal polyps (small growths), and a reaction against aspirin. Usually, the first symptom is rhinitis (nasal inflammation), with sneezing, a runny nose, congestion, and often a reduced sense of smell. This is usually followed by the development of asthma, and then the growth of polyps inside the nose. Polyps can cause sinusitis, post-nasal drip and obstruction of the airways. Finally, aspirin sensitivity develops. This can be quite serious, prompting asthma attacks and anaphylaxis (acute allergic reaction throughout the body), sometimes with hives and swelling of body-parts such as lips, tongue and neck. In some cases this swelling can be so severe that there is a risk of fatal suffocation. Patients often also react to other aspirin-type anti-inflammatory drugs, although acetaminophen or paracetamol is considered safe. The condition may be accompanied by an increase in certain white blood cells. Samter's syndrome may be acquired at any time of life, although it often affects people in their twenties and thirties.

* Schistosomiasis, also known as bilharzia or “snail fever”, is a parasitic disease carried by fresh water snails infected with one of the five varieties of the parasite Schistosoma. Found predominantly in tropical and sub-tropical climates, schistosomiasis infects 240 million people in as many as 78 countries, with a vast majority of the burden occuring in Africa. Schistosomiasis ranks second only to malaria as the most common parasitic disease. Schistosomiasis is transmitted by contact with contaminated fresh water (lakes and ponds, rivers, dams) inhabited by snails carrying the parasite. Swimming, bathing, fishing and even domestic chores such as laundry and herding livestock can put people at risk of contracting the disease. Larvae emerge from the snails and swim in the water until they come into contact with an individual and penetrate the skin. Symptoms of schistosomiasis are caused not by the worms themselves but by the body’s reaction to the eggs. Eggs shed by the adult worms that do not pass out of the body can become lodged in the intestine or bladder, causing inflammation or scarring. Children who are repeatedly infected can develop anemia, malnutrition, and learning difficulties. After years of infection, the parasite can also damage the liver, intestine, spleen, lungs, and bladder. Most people have no symptoms when they are first infected. However, within days after becoming infected, they may develop a rash or itchy skin. Within 1-2 months of infection, symptoms may develop including fever, chills, cough, and muscle aches. Without treatment, schistosomiasis can persist for years. Signs and symptoms of chronic schistosomiasis include: abdominal pain, enlarged liver, blood in the stool or blood in the urine, and problems passing urine. Chronic infection can also lead to increased risk of bladder cancer.

* Scrub typhus, also known as bush typhus, is a disease caused by a bacteria called Orientia tsutsugamushi. Scrub typhus is spread to people through bites of infected chiggers (larval mites). The most common symptoms of scrub typhus include fever, headache, body aches, and sometimes rash. Most cases of scrub typhus occur in rural areas of Southeast Asia, Indonesia, China, Japan, India, and northern Australia. Anyone living in or traveling to areas where scrub typhus is found could get infected. Symptoms

of scrub typhus usually begin within 10 days of being bitten. Signs and symptoms may include: Scrub typhus eschar. Fever and chills. Headache. Body aches and muscle pain. A dark, scab-like region at the site of the chigger bite (also known as eschar). Mental changes, ranging from confusion to coma. Enlarged lymph nodes. Rash. People with severe illness may develop organ failure and bleeding, which can be fatal if left untreated.

* Sexual disorders refers to problems that prevent from wanting or enjoying sexual activity.

* Sialidosis is a rare lysosomal storage disease with two distinct clinical phenotypes. Type I sialadosis is the milder form with onset of gait abnormalities, progressive vision loss, bilateral macular cherry-red spots, and myoclonus in the second or third decade. Ataxia and seizures have also been reported in type I patients. Type II has an earlier onset with coarse facial features, dysostosis multiplex, short stature, developmental delay, mental retardation and hepatosplenomegaly. Type II patients may also present with a congenital-onset form associated with ascites and hydrops fetalis prenatally, an infantile-onset form with the absence of symptoms at birth or a juvenile form that has onset in late childhood and a relatively milder phenotype. Seizures, myoclonus and renal involvement have also been documented in type II cases. The frequency of diagnosed sialidosis in the general population is estimated at approximately one in four million live births.

* Congenital syphilis is a severe, disabling, and often life-threatening infection seen in infants. A pregnant mother who has syphilis can spread the disease through the placenta to the unborn infant. Congenital syphilis is caused by the bacteria Treponema pallidum, which is passed from mother to child during fetal development or at birth. Nearly half of all children infected with syphilis while they are in the womb die shortly before or after birth. Symptoms in newborns may include: Failure to gain weight or failure to thrive. Fever. Irritability. No bridge to nose (saddle nose). Rash of the mouth, genitals, and anus. Rash: starting as small blisters on the palms and soles, and later changing to copper-colored, flat or bumpy rash on the face, palms, and soles. Watery fluid from the nose. Symptoms in older infants and young children may include: Abnormal notched and peg-shaped teeth, called Hutchinson teeth. Bone pain. Blindness. Clouding of the cornea. Decreased hearing or deafness. Gray, mucus-like patches on the anus and outer vagina. Joint swelling. Refusal to move a painful arm or leg. Saber shins (bone problem of the lower leg). Scarring of the skin around the mouth, genitals, and anus.

* Thromboangiitis obliterans is also called Buerger’s disease. It’s a disease that causes blockages in the blood vessels of the feet and hands. The blood vessels become inflamed, which reduces blood flow. Blood clots that further clog blood vessels also develop. The disease causes pain and can lead to tissue damage. In severe cases, it can cause tissue death or necrosis. The disease is found worldwide and can affect people of any race and age group. However, it mainly affects Asian and Middle Eastern men between the ages of 40 and 45 who heavily use or have heavily used tobacco

products, including chewing tobacco. Buerger’s disease begins by causing the arteries to swell and blood clots to form in blood vessels. This restricts normal blood flow and prevents blood from fully circulating through the tissues. This results in tissue death because the tissues are starved of nutrients and oxygen. The risk for developing Buerger’s disease increases in heavy smokers. Scientists don’t know why tobacco smoke increases this risk, but the correlation between the two is well documented. Buerger’s disease usually starts with pain in the areas affected, followed by weakness in the same areas. The symptoms include: pain in the hands and feet or legs and arms, which may come and go; open sores on the toes or fingers; inflamed veins; pale toes or fingers when in cold temperatures.

* A thymoma is a tumor originating from the epithelial cells of the thymus that may be benign or malignant. Thymomas are frequently associated with the neuromuscular disorder myasthenia gravis; thymoma is found in 20% of patients with myasthenia gravis. A third of all people with a thymoma have symptoms caused by compression of the surrounding organs by an expansive mass. These problems may take the form of superior vena cava syndrome, dysphagia (difficulty swallowing), cough, or chest pain. One-third of patients have their tumors discovered because they have an associated autoimmune disorder. As mentioned earlier, the most common of those conditions is myasthenia gravis (MG). Additional associated autoimmune conditions include thymoma-associated multiorgan autoimmunity, pure red cell aplasia and Good syndrome. Other reported disease associations are with acute pericarditis, agranulocytosis, alopecia areata, ulcerative colitis, Cushing's disease, hemolytic anemia, limbic encephalopathy, myocarditis, nephrotic syndrome, panhypopituitarism, pernicious anemia, polymyositis, rheumatoid arthritis, sarcoidosis, scleroderma, sensorimotor radiculopathy, stiff person syndrome, systemic lupus erythematosus and thyroiditis. One-third to one-half of all persons with thymoma have no symptoms at all.

* Tularemia (also known as "rabbit fever") is a serious infectious disease caused by the bacterium Francisella tularensis. The disease is endemic in North America, and parts of Europe and Asia. The primary vectors are ticks and deer flies, but the disease can also be spread through other arthropods. Animals such as rabbits, prairie dogs, hares and muskrats serve as reservoir hosts. Depending on the site of infection, tularemia has six characteristic clinical syndromes: ulceroglandular (the most common type representing 75% of all forms), glandular, oropharyngeal, pneumonic, oculoglandular, and typhoidal. The disease has a very rapid onset, with headache, fatigue, dizziness, muscle pains, loss of appetite and nausea. Face and eyes redden and become inflamed. Inflammation spreads to the lymph nodes, which enlarge and may suppurate (mimicking bubonic plague). Lymph node involvement is accompanied by a high fever. Death may result but is less than 1% if therapy is initiated promptly. The bacteria penetrate into the body through damaged skin and mucous membranes, or through inhalation. Humans are most often infected by tick bite or through handling an infected animal. Ingesting infected water, soil, or food can also cause infection. Tularemia can also be acquired by inhalation; hunters are at a higher risk for this disease because of the potential of inhaling the bacteria during the skinning process. Tularemia is not spread directly from person to person.

* Turner syndrome is a genetic disorder that affects a girl's development. The cause is a missing or incomplete X chromosome. Girls who have it are short, and their ovaries don't work properly. Other physical features typical of Turner syndrome are: Short, "webbed" neck with folds of skin from tops of shoulders to sides of neck. Low hairline in the back. Low-set ears. Swollen hands and feet. Most women with Turner syndrome are infertile. They are at risk for health difficulties such as high blood pressure, kidney problems, diabetes, cataracts, osteoporosis, and thyroid problems.

* The urogenital system is the organ system of the reproductive organs and the urinary system. These are grouped together because of their proximity to each other, their common embryological origin and the use of common pathways, like the male urethra. Disorders of the genitourinary system includes a range of disorders from those that are asymptomatic to those that manifest an array of signs and symptoms. Causes for these disorders include congenital anomalies, infectious diseases, trauma, or conditions that secondarily involve the urinary structure. To gain access to the body, pathogens can penetrate mucous membranes lining the genitourinary tract. Urogenital malformations include: Hypospadias. Epispadias. Labial fusion. Varicocele.

* West Nile fever results from infection by the West Nile virus, a mosquito-borne arbovirus in the genus Flavivirus, family Flaviviridae. West Nile fever has been seen in Africa, Eastern Europe, the Mediterranean region, the Rhone River delta of France, Russia, west and central Asia and the Middle East. Since 1999, the West Nile virus has also been found in the United States. The West Nile virus is transmitted by mosquitoes. Birds are the primary reservoir hosts. Migratory birds may carry West Nile virus into new areas. Infected humans and horses do not seem to spread the virus to other mammals. The incubation period is currently estimated to be 3 to 14 days. Most cases of West Nile fever are mild and flu-like, with fever, headache and body aches. Weakness, malaise, anorexia, lymphadenopathy, nausea and vomiting may also be seen. An erythematous macular, papular, or morbilliform skin rash occasionally develops on the neck, trunk, arms or legs. Most uncomplicated infections resolve in 3 to 6 days. In more severe cases, there may be signs of encephalitis, meningoencephalitis or meningitis; the symptoms may include a high fever, headache, neck stiffness, stupor, disorientation, tremors, convulsions, severe muscle weakness, flaccid paralysis and coma. Ataxia, cranial nerve abnormalities, myelitis, eye pain, polyradiculitis, and seizures have also been seen. In some outbreaks, myocarditis, pancreatitis, and fulminant hepatitis occur.

* Xeroderma pigmentosum (XP) is a very rare skin disorder where a person is highly sensitive to sunlight (photosensitive), has premature skin aging and is prone to developing skin cancers. This is caused by a cellular hypersensitivity to ultraviolet (UV) light as a result of a defect in the DNA repair system. Essentially, the signs and symptoms of xeroderma pigmentosum are a result of an impaired DNA repair system. In people who do not have xeroderma pigmentosum, cell damage from UV light is mended by the DNA repair system. However, people with xeroderma pigmentosum have a defect in this repair system and any damaged cells from UV light remain unrepaired, leading to cancerous cells or cell death.

1.1.27 RTS-19

https://archive.org/details/Resonant_Therapy_Sessions_19

Allergic Granulomatous Angiitis, Cancer-Hypopharyngeal, Cancer-Mouth, Cerebelloretinal Angiomatosis, Cyclosporiasis, Encopresis, Favism, Glycoprotein Syndrome, Histiocytosis X, Ivemark Syndrome, Leukoencephalitis Subacute Sclerosing, Melioidosis, Mucocutaneous Lymph Node, Polyendocrinopathies Autoimmune, Rhabdomyolysis, Rotor Syndrome, Spastic Spinal Monoplegia, Tyrosinemias

* Allergic granulomatous angiitis (AGA) is a rare disease, which varies in clinical manifestation. The clinical course includes three stages. In the first stage most of the patients show symptoms of respiratory disease, 82 per cent of the patients has asthma and 88 per cent chronic rhinitis. In the second stage there is blood eosinophilia and in the last stage involvement of multiple organs.

* Cerebelloretinal Angiomatosis, also Von Hippel–Lindau disease (VHL) is a disease which results from a mutation in the von Hippel–Lindau tumor suppressor gene on chromosome 3p25.3. VHL disease can be subdivided according to the clinical manifestations, although these groups often correlate with certain types of mutations present in the VHL gene. Signs and symptoms associated with VHL disease include headaches, problems with balance and walking, dizziness, weakness of the limbs, vision problems, and high blood pressure. Conditions associated with VHL disease include angiomatosis, hemangioblastomas, pheochromocytoma, renal cell carcinoma, pancreatic cysts (pancreatic serous cystadenoma), endolymphatic sac tumor, and bilateral papillary cystadenomas of the epididymis (men) or broad ligament of the uterus (women). Angiomatosis occurs in 37.2% of patients presenting with VHL disease and usually occurs in the retina. As a result, loss of vision is very common. However, other organs can be affected: strokes, heart attacks, and cardiovascular disease are common additional symptoms. Approximately 40% of VHL disease presents with CNS hemangioblastomas and they are present in around 60-80%. Spinal hemangioblastomas are found in 13-59% of VHL disease and are specific because 80% are found in VHL disease. Although all of these tumours are common in VHL disease, around half of cases present with only one tumour type.

* Cyclosporias is an infection by a microscopic parasite that can affect the intestinal tract and cause diarrhea. People get infected when they eat or drink food or water contaminated with the parasite. Cyclospora infections can occur in people of all ages. It is associated with foreign travel to tropical or subtropical regions of the world. Cyclosporiasis spread by eating or drinking contaminated food or water. Infection spreading directly from one person to another is unlikely. Watery diarrhea is the most

common symptom. It may last a few days to a month or longer. Symptoms may go away and then come back during the course of infection. Other symptoms may include loss of appetite, stomach cramps, weight loss, muscle aches, nausea (a feeling of sickness in the stomach), vomiting, and tiredness. Symptoms appear approximately one week after consuming contaminated food or water.

* Encopresis, also known as paradoxical diarrhea, is voluntary or involuntary fecal soiling in children who have usually already been toilet trained. Children with encopresis often leak stool into their undergarments. This term is usually applied to children, and where the symptom is present in adults, it is more commonly known as fecal leakage (FL), fecal soiling or fecal seepage. Encopresis is commonly caused by constipation, by reflexive withholding of stool, by various physiological, psychological, or neurological disorders, or from surgery (a somewhat rare occurrence).

* Favism is a condition characterized by hemolytic anemia (breakup of red blood cells) after eating fava beans (broad beans) or being exposed to the pollen of the fava plant. This dangerous reaction occurs exclusively in people with a deficiency of the enzyme glucose-6-phosphate dehydrogenase (G6PD), an X-linked genetic trait. For someone with the severe form, exposure to even the pollen of fava beans can cause a reaction, as will consumption of the beans. The patient may feel tired, feverish, or experience a headache, and the condition can also cause abdominal pain, nausea, and vomiting. If left untreated, it can result in serious health problems, like a coma. Early warning signs include jaundice, dark urine, and a general sense of feeling run down and tired all the time.

* Glycoprotein Syndrome is one of several rare inborn errors of metabolism in which glycosylation of a variety of tissue proteins and/or lipids is deficient or defective. Congenital disorders of glycosylation are sometimes known as CDG syndromes. They often cause serious, sometimes fatal, malfunction of several different organ systems (especially the nervous system, muscles, and intestines) in affected infants. The specific problems produced differ according to the particular abnormal synthesis involved. Common manifestations include ataxia; seizures; retinopathy; liver fibrosis; coagulopathies; failure to thrive; dysmorphic features (e.g., inverted nipples and subcutaneous fat pads; and strabismus.

* Histiocytosis X is a generic term that refers to an increase in the number of histiocytes, a type of white blood cell, that act as scavengers to remove foreign material from the blood and tissues. Since recent research demonstrated Langerhan cell involvement as well as histiocytes. Histiocytosis X or LCH is characterized by a distinct inflammatory and proliferative process but differs from other forms in the parts of the body involved. The least severe of the histiocytosis X/LCH family is eosinophilic granuloma. Approximately 60-80% of all diagnosed cases are in this classification, which usually occurs in children aged 5-10 years. The bones are involved 50-75% of the time, which includes the skull or mandible, and the long bones. If the bone marrow is involved, anemia can result. With skull involvement, growths can occur behind the eyes, bulging them forward. The lungs are involved less than 10% of the time, and this involvement

signals the worst prognosis. symptoms may include painful lumps in the skull and limbs as well as rashes on the skin. General symptoms may include: poor appetite, failure to gain weight, recurrent fever, and irritability. Symptoms from other possible sites of involvement include: gums: swelling, usually without significant discomfort; ear: chronic discharge; liver or spleen: abdominal discomfort or swelling; pituitary: This gland at the base of the brain is affected at some stage in approximately 20%-30% of children causing a disturbance in water balance to produce thirst and frequent urination; eyes: due to the bony disease, behind-the-eye bulging may occur (exophthalmos); lungs: breathing problems.

* Ivemark syndrome is a rare disorder that affects multiple organ systems of the body. It is characterized by the absence (asplenia) or underdevelopment (hypoplasia) of the spleen, malformations of the heart and the abnormal arrangement of the internal organs of the chest and abdomen. The symptoms of Ivemark syndrome can vary greatly depending upon the specific abnormalities present. Many infants have symptoms associated with abnormalities affecting the heart including bluish discoloration to the skin due to a lack of oxygen in the blood (cyanosis), heart murmurs, and signs of congestive heart failure. Ivemark syndrome often causes life-threatening complications during infancy. The exact cause of Ivemark syndrome is not known. Ivemark syndrome is classified as a heterotaxy disorder or a laterality disorder. These terms refer to the failure of the internal organs of the chest and abdomen to be arranged in the proper location within the body.

* Leukoencephalitis subacute sclerosing or subacute sclerosing panencephalitis (SSPE) is a progressive neurological disorder characterized by inflammation of the brain (encephalitis). The disease may develop due to reactivation of the measles virus or an inappropriate immune response to the measles virus. SSPE usually develops 2 to 10 years after the original viral attack. Initial symptoms may include memory loss, irritability, seizures, involuntary muscle movements, and/or behavioral changes, leading to neurological deterioration.

* Melioidosis, also called Whitmore's disease, is an infectious disease that can infect humans or animals. The disease is caused by the bacterium Burkholderia pseudomallei. It is predominately a disease of tropical climates, especially in Southeast Asia and northern Australia where it is widespread. The bacteria causing melioidosis are found in contaminated water and soil. It is spread to humans and animals through direct contact with the contaminated source. It is very rare for people to get the disease from another person. While a few cases have been documented, contaminated soil and surface water remain the primary way in which people become infected. There are several different types of melioidosis, each with its own signs and symptoms. Pulmonary infection: Melioidosis signs and symptoms most commonly stem from lung disease where the infection can form a cavity of pus (abscess). The effects of a pulmonary infection can range from mild bronchitis to severe pneumonia. As a result, patients also may experience fever, headache, loss of appetite (anorexia), cough, shortness of breath, chest pain, and general muscle soreness. Localized infection: The effects can also be localized to infection on the skin (cellulitis) with pain or swelling, ulceration, and

abscess, with associated fever and muscle aches. Bloodstream infection: If melioidosis enters the bloodstream, symptoms can include fever, headache, respiratory distress, abdominal discomfort, joint pain, and disorientation. Disseminated infection: Melioidosis can spread from the skin through the blood to become a chronic form of melioidosis affecting the heart, brain, liver, kidneys, joints, and eyes. Symptoms of a disseminated melioidosis infection include fever, weight loss, stomach or chest pain, muscle or joint pain, headache, and seizures.

* Mucocutaneous lymph node syndrome is a syndrome of unknown origin that mainly affects young children. It causes fever, reddening of the eyes (conjunctivitis) and lips and mucous membranes of the mouth, ulcerative gum disease (gingivitis), swollen glands in the neck (cervical lymphadenopathy), and a rash that is raised and bright red (maculoerythematous) in a glove-and-sock fashion over the hands and feet. The skin there becomes hard, swollen (edematous), and peels. The name "mucocutaneous lymph node syndrome" is descriptive because the disease is characterized by the typical changes in the mucus membranes that line the lips and mouth and by the enlarged and tender lymph glands.

* Polyendocrinopathies autoimmune or autoimmune polyendocrine syndromes are a heterogeneous group of rare diseases characterised by autoimmune activity against more than one endocrine organs, although non-endocrine organs can be affected. There are three "autoimmune polyendocrine syndromes", and a number of other diseases which have endocrine autoimmunity as one of their features.

* Rhabdomyolysis is the breakdown of damaged skeletal muscle. Muscle breakdown causes the release of myoglobin into the bloodstream. Myoglobin is the protein that stores oxygen in the muscles. If there is too much myoglobin in the blood, it can cause kidney damage. Rhabdomyolysis is always triggered by muscle injury. This injury can have physical, chemical or genetic causes. Anything that damages the muscles can cause this condition. Some people develop rhabdomyolysis because of genetic conditions such as metabolic problems. Many types of infection and inflammation can cause rhabdomyolysis. The condition can also occur due to exposure to some drugs. The initial symptoms of rhabdomyolysis can be subtle. Theyâre not specific and may mimic other conditions. The symptoms of rhabdomyolysis include: muscle weakness, low urine output, fatigue, soreness, bruising, dark, tea-colored urine, infrequent urination, a fever, a sense of malaise, or feeling sick, nausea, vomiting, confusion, agitation.

* Rotor syndrome is a relatively mild condition characterized by elevated levels of a substance called bilirubin in the blood (hyperbilirubinemia). Bilirubin is produced when red blood cells are broken down. It has an orange-yellow tint, and buildup of this substance can cause yellowing of the skin or whites of the eyes (jaundice). In people with Rotor syndrome, jaundice is usually evident shortly after birth or in childhood and may come and go; yellowing of the whites of the eyes (also called conjunctival icterus) is often the only symptom. There are two forms of bilirubin in the body: a toxic form called unconjugated bilirubin and a nontoxic form called conjugated bilirubin. People

with Rotor syndrome have a buildup of both unconjugated and conjugated bilirubin in their blood, but the majority is conjugated.

* Spastic spinal monoplegia is a syndrome associated with injury to the lateral half of the spinal cord. The condition is characterized by the following clinical features (which are found below the level of the lesion): contralateral hemisensory anesthesia to pain and temperature, ipsilateral loss of propioception, and ipsilateral motor paralysis. Tactile sensation is generally spared.

* Tyrosinemias are a group of disorders which have in common elevations of tyrosine in the blood and urine secondary to an enzyme deficiency. Type I tyrosinemia features episodic weakness, self-mutilation, hepatic necrosis, renal tubular injury, and seizures and is caused by a deficiency of the enzyme fumarylacetoacetase. Type II tyrosinemia features intellectual disability, painful corneal ulcers, and keratoses of the palms and plantar surfaces and is caused by a deficiency of the enzyme tyrosine transaminase. Type III tyrosinemia features intellectual disability and is caused by a deficiency of the enzyme 4-hydroxyphenylpyruvate diox

1.1.28 RTS-20

https://archive.org/details/Resonant_Therapy_Sessions_20

Anthrax; Aphasia Acquired Epileptic; Ascites; Beriberi; Beriberi Cerebral; Cancer-Extracranial Tumor; Cancer-Lymphoplasmacytic; Cancer-Malignant Mesothelioma; Congenital Fiber Type Disproportion; Corticobasal Degeneration; Distal Trisomy; Ewing Tumor; Fibrinogen Deficiency; Granulomatosis Wegener; Hyperemia; Hypersalivation; Influenza A; Influenza B; Long QT Syndrome; Melorheostosis; Necrobacillosis; Neutral Amino Acid Transport; Oculocerebrorenal Syndrome; Oxycephaly; Pallister-Killian Syndrome; Pemphigoid; Pyoderma Gangrenosum; Ranula; Thanatophoric Dysplasia; Triple-Symptom Complex

* Anthrax is an infectious disease caused by spores of the bacterium, Bacillus anthracis.Human anthrax cases can occur in 3 forms. Cutaneous infection is the most common manifestation of anthrax in humans, accounting for more than 95 percent of cases. Ingestion of undercooked or raw, infected meat can cause gastrointestinal anthrax infection. Breathing in airborne spores may lead to inhalation anthrax. The mortality rates from anthrax vary, depending on exposure, and are approximately 20% for cutaneous anthrax without antibiotics and 25 - 75% for gastrointestinal anthrax; inhalation anthrax has a fatality rate that is 80% or higher. Cutaneous anthrax can usually be successfully treated with antibiotics and some antibiotics have also been approved for post-exposure prophylaxis.

* Aphasia Acquired Epileptic or aphasia with convulsive disorder—is a rare childhood neurological syndrome. Acquired epileptic aphasia is characterized by the sudden or gradual development of aphasia (the inability to understand or express language) and an abnormal electroencephalogram (EEG). Typically, children with acquired epileptic aphasia develop normally, but then lose their language skills. While many affected individuals have clinical seizures, some only have electrographic seizures, including electrographic status epilepticus of sleep (ESES). The first indication of the language problem is usually auditory verbal agnosia. This is demonstrated in patients in multiple ways including the inability to recognize familiar noises and the impairment of the ability to lateralize or localize sound. In addition, receptive language is often critically impaired, however in some patients, impairment in expressive language is the most profound. Generally, earlier manifestation of the disease correlates with poorer language recovery, and with the appearance of night seizures that last for longer than 36 months.The syndrome can be difficult to diagnose and may be misdiagnosed as autism, pervasive developmental disorder, hearing impairment, learning disability, auditory/verbal processing disorder, attention deficit hyperactivity disorder, intellectual disability, childhood schizophrenia, or emotional/behavioral problems.

* Ascites is the abnormal build-up of fluid in the abdomen. Symptoms may include increased abdominal size, increased weight, abdominal discomfort, and shortness of breath. Complications can include spontaneous bacterial peritonitis. In the developed world, the most common cause is liver cirrhosis. Other causes include cancer, heart failure, tuberculosis, pancreatitis, and blockage of the hepatic vein. In cirrhosis, the underlying mechanism involves high blood pressure in the portal system and dysfunction of blood vessels.

* Beriberi. Thiamine deficiency is a medical condition of low levels of thiamine (vitamin B1). A severe and chronic form is known as beriberi. The two main types in adults are wet beriberi and dry beriberi. Wet beriberi affects the cardiovascular system, resulting in a fast heart rate, shortness of breath, and leg swelling. Dry beriberi affects the nervous system, resulting in numbness of the hands and feet, confusion, trouble moving the legs, and pain. A form with loss of appetite and constipation may also occur. Another type, acute beriberi, found mostly in babies, presents with loss of appetite, vomiting, lactic acidosis, changes in heart rate, and enlargement of the heart. Risk factors include a diet of mostly white rice, alcoholism, dialysis, chronic diarrhea, and taking high doses of diuretics. In rare cases, it may be due to a genetic condition that results in difficulties absorbing thiamine found in food.

* Beriberi Cerebral. Dry beriberi affects the nervous system, resulting in numbness of the hands and feet, confusion, trouble moving the legs, and pain. A form with loss of appetite and constipation may also occur. Dry beriberi causes wasting and partial paralysis resulting from damaged peripheral nerves. It is also referred to as endemic neuritis. It is characterized by:
Difficulty with walking; Tingling or loss of sensation (numbness) in hands and feet; Loss of tendon reflexes; Loss of muscle function or paralysis of the lower legs; Mental confusion/speech difficulties; Pain; Involuntary eye movements (nystagmus);

Vomiting. A selective impairment of the large proprioceptive sensory fibers without motor impairment can occur and present as a prominent sensory ataxia, which is a loss of balance and coordination due to loss of the proprioceptive inputs from the periphery and loss of position sense. Wernicke's encephalopathy (WE), Korsakoff syndrome (alcohol amnestic disorder), and Wernicke–Korsakoff syndrome are forms of dry beriberi. Wernicke's encephalopathy is the most frequently encountered manifestation of thiamine deficiency in Western society, though it may also occur in patients with impaired nutrition from other causes, such as gastrointestinal disease, those with HIV/AIDS, and with the injudicious administration of parenteral glucose or hyperalimentation without adequate B-vitamin supplementation. This is a striking neuro-psychiatric disorder characterized by paralysis of eye movements, abnormal stance and gait, and markedly deranged mental function. Korsakoff syndrome, in general, is considered to occur with deterioration of brain function in patients initially diagnosed with WE. This is an amnestic-confabulatory syndrome characterized by retrograde and anterograde amnesia, impairment of conceptual functions, and decreased spontaneity and initiative.

* Cancer-Extracranial Tumor. An Extracranial Germ-Cell Tumor (EGCT) occurs in the abnormal growth of germ cells in the gonads (testes or ovaries) and the areas other than the brain via tissue, lymphatic system, or circulatory system. The tumor can be benign or malignant (cancerous) by its growth rate. The chance of children who are under 15 years old having EGCTs is 3%, in comparison to adolescents, a possibility of 14% with aged 15 to 19 can have EGCTs. There is no obvious cut point in between children and adolescents. However, common cut points in researches are 11 years old and 15 years old. The signs and symptoms are varied according to the location of the EGCTs.

* Cancer-Lymphoplasmacytic. Lymphoplasmacytic lymphoma is an indolent or slow-growing form of non-Hodgkin lymphoma NHL that starts in the B cells, and 1% of people with NHL have this subtype. Lymphoplasmacytic lymphoma often involves the bone marrow, sometimes lymph nodes, and the spleen. In many people, this lymphoma produces a protein, called immunoglobulin M (IgM) or M protein, that is found in the blood. If this occurs, the condition is called Waldenstrom macroglobulinemia. The majority of cases of lymphoplasmacytic lymphoma are Waldenstrom macroglobulinemia.

* Cancer-Malignant Mesothelioma is a cancer that most often forms in the thin layers of tissue that line the lungs, chest, or abdomen. In rare cases, it starts in the membranes that surround the heart or testicles. Asbestos exposure is a primary risk of mesothelioma.

* Congenital fiber-type disproportion is a condition that primarily affects skeletal muscles, which are muscles used for movement. People with this condition typically experience muscle weakness (myopathy), particularly in the muscles of the shoulders, upper arms, hips, and thighs. Weakness can also affect the muscles of the face and muscles that control eye movement (ophthalmoplegia), sometimes causing droopy

eyelids (ptosis). Individuals with congenital fiber-type disproportion generally have a long face, a high arch in the roof of the mouth (high-arched palate), and crowded teeth.

* Corticobasal degeneration is a progressive neurological disorder characterized by nerve cell loss and atrophy (shrinkage) of multiple areas of the brain including the cerebral cortex and the basal ganglia. Corticobasal degeneration progresses gradually. Initial symptoms, which typically begin at or around age 60, may first appear on one side of the body (unilateral), but eventually affect both sides as the disease progresses. Symptoms are similar to those found in Parkinson disease, such as poor coordination, akinesia (an absence of movements), rigidity (a resistance to imposed movement),disequilibrium (impaired balance); and limb dystonia (abnormal muscle postures). Other symptoms such as cognitive and visual-spatial impairments, apraxia (loss of the ability to make familiar, purposeful movements), hesitant and halting speech, myoclonus (muscular jerks), and dysphagia (difficulty swallowing) may also occur. An individual with corticobasal degeneration eventually becomes unable to walk.

* Distal Trisomy. A trisomy is a type of polysomy in which there are three instances of a particular chromosome, instead of the normal two. A trisomy is a type of aneuploidy (an abnormal number of chromosomes).

* Ewing Tumor. Ewing tumors (also known as Ewing sarcomas) are a group of cancers that start in the bones or nearby soft tissues and share some common features. These tumors can develop in people of any age, but they are most common in older children and teens. The group includes Ewing tumor of bone (ETB or Ewing sarcoma of bone), extraosseous Ewing tumors (EOE tumors), primitive neuroectodermal tumors (PNET or peripheral neuroepithelioma), and Askin tumors (PNET of the chest wall).

* Fibrinogen (factor I) Deficiency is a type of clotting disorder. A specific protein is missing from the blood so that injured blood vessels cannot heal in the usual way. There are three main types of fibrinogen deficiency: Afibrinogenaemia – the most serious form of fibrinogen deficiency where there is no fibrinogen produced at all. Hypofibrinogenaemia – where reduced amounts of fibrinogen are produced by the body, which can cause mild, moderate or severe bleeding, depending on the amount of fibrinogen present. Dysfibrinogenaemia – this is where the amount of fibrinogen produced is normal but it does not work properly. There are many subtypes of dysfibrinogenaemia, each with a slightly different cause. Dysfibrinogenaemia rarely causes bleeding problems but can increase the risks of clots developing inside a blood vessel.
The severity of symptoms ranges from mild to severe depending on the amount of fibrinogen present in the blood and its activity.

* Granulomatosis Wegener. Granulomatosis with polyangiitis (GPA), previously known as Wegener's granulomatosis, is a rare disease. It is a type of vasculitis, or inflammation of the blood vessels. The inflammation limits the flow of blood to important organs, causing damage. It can affect any organ, but it mainly affects the sinuses, nose, trachea (windpipe), lungs, and kidneys. The cause of GPA is unknown. It can affect people at

any age. Men and women are equally affected. It is more common in whites. Symptoms may include joint pain, weakness, tiredness, and cold symptoms such as a runny nose that doesn't get better. Doctors use blood tests, chest X-rays, and biopsies to diagnose GPA and rule out other causes of the symptoms.

* Hyperemia (also hyperaemia) is the increase of blood flow to different tissues in the body. It can have medical implications but is also a regulatory response, allowing change in blood supply to different tissues through vasodilation. Clinically, hyperemia in tissues manifests as erythema (redness of the skin) because of the engorgement of vessels with oxygenated blood. Hyperemia can also occur due to a fall in atmospheric pressure outside the body.

* Hypersalivation is the excessive production of saliva. It has also been defined as increased amount of saliva in the mouth, which may also be caused by decreased clearance of saliva. Hypersalivation can contribute to drooling if there is an inability to keep the mouth closed or difficulty in swallowing (dysphagia) the excess saliva, which can lead to excessive spitting.

* Influenza A, Influenza, or flu, is a viral infection that affects the respiratory system. Influenza A is one of four types of the virus, which can cause a cough, body aches, and a sore throat. The influenza A virus is highly contagious. It can spread through tiny droplets of bodily fluid from coughing, sneezing, or talking. Someone may even catch the flu by touching their mouth or nose after coming into contact with a surface or object that has the virus on it. Human flu symptoms usually include fever, cough, sore throat, muscle aches, conjunctivitis and, in severe cases, breathing problems and pneumonia that may be fatal. The severity of the infection will depend in large part on the state of the infected person's immune system and if the victim has been exposed to the strain before, and is therefore partially immune.

* Influenza B tends to cause a milder form of the flu than influenza A. While influenza A can lead to moderate-to-severe flu symptoms across all age groups, and in animals, influenza B only affects humans. Also, influenza B typically affects children more often than adults. It generally causes stronger symptoms than influenza C. In many people, the flu goes away on its own without treatment. However, older adults and people with certain underlying health conditions may have a risk of developing serious complications.

* Long QT syndrome (LQTS) is a condition in which repolarization of the heart after a heartbeat is affected. It results in an increased risk of an irregular heartbeat which can result in fainting, drowning, seizures, or sudden death. These episodes can be triggered by exercise or stress. Some rare forms of LQTS are associated with other symptoms and signs including deafness and periods of muscle weakness.

* Melorheostosis is a rare skeletal abnormality that causes abnormal growth of new bone tissue on top of existing bones. Signs and symptoms typically appear by late childhood or adolescence. Signs and symptoms may include deformity, contracture,

chronic pain, stiffness, and limited range of motion. In some cases, the overlying skin and soft tissue may show thickening, shininess, reddening or darkening, linear scleroderma, and/or swelling. The condition typically affects the long bones, and the legs are affected more often than the arms. Sometimes the small bones of the hand or foot are affected, and rarely, bones of the skull or trunk are affected. The condition is sometimes associated with other bone or connective tissue abnormalities.

* Necrobacillosis, often used synonymously with Lemierre's syndrome, is a form of abscess infection in the peritonsillar area associated with a thrombophlebitis and caused by the strict anaerobic species Fusobacterium necrophorum. The thrombosis formed affects the internal jugular vein, from which the bacteria are seeded out in the bloodstream and cause bacteremia. Septicemia is a common complication with an often fatal outcome. Necrobacillosis is very rare and is referred to as the 'forgotten disease'. It is probably frequently overlooked in clinical practice in its early and milder forms such as tonsillitis (sore throat) and peritonsillar abscess. F. necrophorum frequently participates in these infections and is thus suspected to have an etiological role in Lemierre's syndrome. Similarly, F. necrophorum seems to play an important role in noma (cancrum oris) and this disease is also included in the necrobacillosis complex.

* Neutral Amino Acid Transport (amino acid transport disorders, Hartnup disease) is a condition caused by the body's inability to absorb certain protein building blocks (amino acids) from the diet. As a result, affected individuals are not able to use these amino acids to produce other substances, such as vitamins and proteins. Most people with Hartnup disease are able to get the vitamins and other substances they need with a well-balanced diet. People with Hartnup disease have high levels of various amino acids in their urine (aminoaciduria). For most affected individuals, this is the only sign of the condition. However, some people with Hartnup disease have episodes during which they exhibit other signs, which can include skin rashes; difficulty coordinating movements (cerebellar ataxia); and psychiatric symptoms, such as depression or psychosis. These episodes are typically temporary and are often triggered by illness, stress, nutrient-poor diet, or fever. These features tend to go away once the trigger is remedied, although the aminoaciduria remains. In affected individuals, signs and symptoms most commonly occur in childhood.

* Oculocerebrorenal syndrome (also called Lowe syndrome) is a rare X-linked recessive disorder characterized by congenital cataracts, hypotonia, intellectual disability, proximal tubular acidosis, aminoaciduria and low-molecular-weight proteinuria. Lowe syndrome can be considered a cause of Fanconi syndrome (bicarbonaturia, renal tubular acidosis, potassium loss and sodium loss. Boys with Lowe syndrome are born with cataracts in both eyes; glaucoma is present in about half of the individuals with Lowe syndrome, though usually not at birth. While not present at birth, kidney problems develop in many affected boys at about one year of age. Renal pathology is characterized by an abnormal loss of certain substances into the urine, including bicarbonate, sodium, potassium, amino acids, organic acids, albumin, calcium and L-carnitine. This problem is known as Fanconi-type renal tubular dysfunction.

* Oxycephaly is a type of cephalic disorder where the top of the skull is pointed or conical due to premature closure of the coronal suture plus any other suture, like the lambdoid, or it may be used to describe the premature fusion of all sutures. It should be differentiated from Crouzon syndrome. Oxycephaly is the most severe of the craniosynostoses.

* Pallister-Killian Syndrome is a developmental disorder that affects many parts of the body. This condition is characterized by extremely weak muscle tone (hypotonia) in infancy and early childhood, intellectual disability, distinctive facial features, sparse hair, areas of unusual skin coloring (pigmentation), and other birth defects. Most babies with Pallister-Killian syndrome are born with significant hypotonia, which can cause difficulty breathing and problems with feeding. Hypotonia also interferes with the normal development of motor skills such as sitting, standing, and walking. About 30 percent of affected individuals are ultimately able to walk without assistance. Additional developmental delays result from intellectual disability, which is usually severe to profound. Speech is often limited or absent in people with this condition. Pallister-Killian syndrome is associated with a distinctive facial appearance that is often described as "coarse." Characteristic facial features include a high, rounded forehead; a broad nasal bridge; a short nose; widely spaced eyes; low-set ears; rounded cheeks; and a wide mouth with a thin upper lip and a large tongue. Some affected children are born with an opening in the roof of the mouth (cleft palate) or a high arched palate. Additional features of Pallister-Killian mosaic syndrome can include hearing loss, vision impairment, seizures, extra nipples, genital abnormalities, and heart defects. Affected individuals may also have skeletal abnormalities.

* Pemphigoid is a group of rare autoimmune blistering diseases of the skin, and mucous membranes. As its name indicates, pemphigoid is similar in general appearance to pemphigus, but, unlike pemphigus, pemphigoid does not feature acantholysis, a loss of connections between skin cells. Pemphigoid is more common than pemphigus, and is slightly more common in women than in men. It is also more common in people aged over 70 years than it is in younger people.It causes blisters come up on the skin and, less often, in the mouth too. This is in contrast to a related condition known as ‘mucous membrane pemphigoid’ in which the brunt of the trouble is borne by the moist surfaces of the body (the mucous membranes) such as the eyes, inside the nose and mouth, and the genitals. Yet another type of pemphigoid (pemphigoid gestationis) occurs during pregnancy. Itching is common. The raw areas left when the blisters break can be sore, both on the skin and in the mouth.

* Pyoderma gangrenosum is a rare, destructive inflammatory skin disease of which a painful nodule or pustule breaks down to form a progressively enlarging ulcer. Lesions may occur either in the absence of any apparent underlying disorder or in association with other diseases, such as ulcerative colitis, Crohn's disease, polyarthritis (an inflammation of several joints together), gammopathy, vasculitis, leukemia, and other conditions. Pyoderma gangrenosum presents as a rapidly enlarging, very painful ulcer. It is one of a group of autoinflammatory disorders known as neutrophilic dermatoses. The name pyoderma gangrenosum is historical. The condition is not an infection

(pyoderma), nor does it cause gangrene. It is characterised by a full-thickness ulcer with blue undermined borders and by pathergy, the appearance of new lesions after local trauma. Pyoderma gangrenosum is an uncommon disease that affects males and females of any age but is more common in those aged over 50 years. It is thought to be a reaction to an internal disease or condition.

* Ranula is a fluid collection, or cyst, that forms in the mouth under the tongue. It is filled with saliva (spit) that has leaked out of a damaged salivary gland. Instead of the saliva draining from the glands directly into the mouth, one of these glands is damaged, so the saliva leaks into the tissues next to the gland and forms a bubble. Sometimes a ranula forms without a known cause. Other times, trauma to the mouth, from oral surgery, getting hit in the face or biting the lower lip, can start one.
There are two types of ranulas. A simple (or oral) ranula is when the cyst stays in the floor of the mouth, underneath the tongue. A plunging (or diving) ranula is when the cyst grows down under the mouth and into the neck. It is rarer than a simple ranula and may occur along with a simple ranula. A clear or bluish bubble-like growth on the floor of the mouth is the main symptom of a ranula. Since they don’t typically cause pain, they may go unnoticed until the cyst grows in size. Then it may cause problems with speech, swallowing and, occasionally, breathing if it grows large enough to press on the trachea (windpipe). A plunging ranula may present as a neck mass with or without the bubble in the floor of mouth.

* Thanatophoric dysplasia is a severe skeletal disorder characterized by extremely short limbs and folds of extra (redundant) skin on the arms and legs. Other features of this condition include a narrow chest, short ribs, underdeveloped lungs, and an enlarged head with a large forehead and prominent, wide-spaced eyes. Researchers have described two major forms of thanatophoric dysplasia, type I and type II. Type I thanatophoric dysplasia is distinguished by the presence of curved thigh bones and flattened bones of the spine (platyspondyly). Type II thanatophoric dysplasia is characterized by straight thigh bones and a moderate to severe skull abnormality called a cloverleaf skull. The term thanatophoric is Greek for "death bearing." Infants with thanatophoric dysplasia are usually stillborn or die shortly after birth from respiratory failure; however, a few affected individuals have survived into childhood with extensive medical help.

* Triple-Symptom Complex or Behcet's syndrome is a disease that involves vasculitis, which is inflammation of the blood vessels. It causes problems in many parts of the body. The most common symptoms are: Sores in the mouth, sores on the sex organs, other skin sores, swelling of parts of the eye, pain, swelling and stiffness of the joints. More serious problems can include meningitis, blood clots, inflammation of the digestive system and blindness. Doctors aren't sure what causes Behcet's. It is rare in the United States, but is common in the Middle East and Asia. It mainly affects people in their 20s and 30s. Diagnosing Behcet's can take a long time, because symptoms may come and go, and it may take months or even years to have all of the symptoms. Treatment focuses on reducing pain and preventing serious problems. Most people can control symptoms with treatment.

1.1.29 RTS-21

https://archive.org/details/Resonant_Therapy_Sessions_21

Analphalipoproteinemia; Ascites Gelatinous; Bannayan-Zonana Syndrome; Burning Mouth Syndrome; Cancer-Neuroblastoma; Cancer-Oropharyngeal; Cancer-Penile; Cerebrohepatorenal Syndrome; CHARGE Syndrome; Dysostosis Cleidocranial; Dysostosis Craniofacial; Ehrlichiosis; Eisenmenger Syndrome; Fascioliasis; Granulomatosis Lipid; Hexosaminidase-A Deficiency; Hexosaminidase-B Deficiency; Kallmann Syndrome; Leukodystrophy Metachromatic; Leukodystrophy Spongiform; Molluscum Contagiosum; Nail Patella Syndrome; Neuroblastoma; Periodic Disease; Periodic Paralysis Familial; Progeria; Progeria Adult; Pseudo-Gaucher Disease; Toxoplasmosis; Trichinosis

* Analphalipoproteinemia or Tangier disease is a disorder of lipoprotein metabolism is associated in many cases with corneal infiltrates, cicatricial ectropion, poor lid closure, and exposure keratopathy. The corneal clouding alone generally cause little reduction of acuity but those with poor lid function and exposure keratopathy may have severe vision loss. There may be weakness in the periorbital and lid muscles. The corneal infiltration occurs late in life but is progressive with older individuals having the greatest visual impairment. The corneal infiltrates are described as a “dot-like haze”, more prominent centrally and located in the stroma. On electron microscopy, deposits in the conjunctiva are described as birefringent lipid particles located in pericytes and fibrocytes. Lipid deposition occurs throughout the body including the conjunctiva. Corneal hypesthesia has been reported. Patients with Tangier disease have significant enlargement of the liver, spleen and lymph nodes. The tonsils are also frequently enlarged and have a characteristic yellow-orange coloration. The enlargement of these organs is due to lipid infiltration. Plasma levels of cholesterol and HDL are characteristically slightly low while triglycerides are mildly elevated. Peripheral neuropathy and muscle atrophy can be debilitating. Severe coronary artery disease is common with onset sometime in the 5th decade.

* Ascites Gelatinous (also Pseudomyxoma peritonei or Gelatinous Peritoneal Disease) is a rare condition that refers to an anatomo-clinical entity characterized by ascites of variable abundance in the peritoneal cavity, viscous or mucinous, associated or not with neoplastic epithelial cells. It predominates in women. The disease is usually diagnosed after the age of 40. In 30 to 50% of cases, patients present with progressive abdominal distension (so-called ``jelly belly''). Diagnosis may follow discovery of an ovarian mass in women or recent development of inguinal hernia, appendicitis or intestinal occlusion. Other less common signs include abdominal pain, weight loss, urinary symptoms, constipation, vomiting, and dyspnea. In 90% of cases, the primary lesion is an

appendiceal mucinous tumor, but ovarian mucinous tumors have been reported (7%) and, more rarely, mucinous tumors of the colon, stomach, pancreas, and urachus. Prognosis is good in case of early management. Pseudomyxoma peritonei is slowly progressive but recurrence after complete tumor removal may occur.

* Bannayan-Zonana Syndrome or Bannayan-Riley-Ruvalcaba syndrome is a genetic condition characterized by a large head size (macrocephaly), multiple noncancerous tumors and tumor-like growths called hamartomas, and dark freckles on the penis in males. The characteristic features of this disease is are macrocephaly (larger than normal sized head), intestinal polyposis (multiple benign polyps in the intestines), lipomas (tumors below the skin made up of fatty tissue), and pigmented skin lesion (macule) in the area of the penis called the glans penis. Other common features of BRRS include high birth weight, developmental delay, mental deficiency, myopathy (problems with the tone and contraction of skeletal muscles([muscles that control voluntary movements]) of the proximal muscles, joint hyperextensibility (unusually large range of joint movement), pectus excavatum (sunken chest), and scoliosis. When Bannayan-Riley-Ruvalcaba syndrome is not caused by mutations or deletions of the PTEN gene, the cause of the condition is unknown.

* Burning Mouth Syndrome (BMS) is a painful, frustrating condition often described as a scalding sensation on the tongue, lips, palate, or throughout the mouth. Although BMS can affect anyone, it occurs most commonly in middle-aged or older women. BMS often occurs with a range of medical and dental conditions, from nutritional deficiencies and menopause to dry mouth and allergies. But their connection is unclear, and the exact cause of BMS cannot always be identified with certainty. Moderate to severe burning in the mouth is the main symptom of BMS and can persist for months or years. For many people, the burning sensation begins in late morning, builds to a peak by evening, and often subsides at night. Some feel constant pain; for others, the pain comes and goes. Anxiety and depression are common in people with BMS and may result from their chronic pain. Other symptoms of BMS include: Tingling or numbness on the tip of the tongue or in the mouth, bitter or metallic chages in taste, dry or sore mouth.

* Cancer-Neuroblastoma is a cancer that starts in certain very early forms of nerve cells, most often found in an embryo or fetus. (The term neuro refers to nerves, while blastoma refers to a cancer that starts in immature or developing cells). This type of cancer occurs most often in infants and young children. Neuroblastomas are cancers that start in early nerve cells (called neuroblasts) of the sympathetic nervous system, so they can be found anywhere along this system. Most neuroblastomas begin in the abdomen, either in an adrenal gland or in sympathetic nerve ganglia. Most of the rest start in sympathetic ganglia near the spine in the chest or neck, or in the pelvis. Rarely, a neuroblastoma has spread so widely by the time it is found that doctors can’t tell exactly where it started. Some neuroblastomas grow and spread quickly, while others grow slowly. Sometimes, in very young children, the cancer cells die for no reason and the tumor goes away on its own. In other cases, the cells sometimes mature on their own into normal ganglion cells and stop dividing (which makes the tumor a benign ganglioneuroma).

* Cancer-Oropharyngeal (or oropharyngeal carcinoma) is a type of head and neck cancer that develops in the oropharynx. The oropharynx is the part of the throat directly behind the mouth. This area helps you speak and swallow. 'Oro' means mouth and the 'pharynx' is the throat. The most common type of oropharyngeal cancer is squamous cell cancer. Squamous cell cancer of the oropharynx is one of the most common types of head and neck cancer. Often the first symptom or oropharyngeal cancer is a painless swelling or lump in the neck. Other common symptoms include: a sore throat or tongue, earache, difficulty swallowing or moving your mouth and jaw, changes in your voice, bad breath, unexplained weight loss, unequal-looking tonsils.

* Cancer-Penile is cancer that develops in the skin or tissues of the penis. Symptoms may include abnormal growth, an ulcer or sore on the skin of the penis, and bleeding or foul smelling discharge. Risk factors include phimosis (inability to retract foreskin of the penis), chronic inflammation, smoking, HPV infection, condylomata acuminate, having multiple sexual partners, and early age of sexual intercourse. Around 95% of penile cancers are squamous cell carcinomas. Other types of penile cancer such as Merkel cell carcinoma, small cell carcinoma, and melanoma are generally rare. Penile cancer can present as redness and irritation on the penis with a skin thickening on the glans or inner foreskin or an ulcerative, outward growing (exophytic) or “finger-like” (papillary) growth. Penile cancer may accompany penile discharge with or without difficulty or burning or tingling while urinating (dysuria) and bleeding from the penis.

* Cerebrohepatorenal Syndrome (Zellweger syndrome) is a multisystem metabolic abnormality. As the name implies it primarily affects the central nervous system, liver and kidneys. This is a rare genetic congenital (present at birth) disorder in which there is a reduction or absence of peroxisomes (cell structures that rid the body of toxins) in the cells of the liver, kidneys, and brain. Children with Zellweger syndrome are unable to process certain types of chain fatty acids. Because peroxisomes are lacking in those with Zellweger syndrome, the body is not adequately detoxified. t is the most severe of the peroxisomal disorders. The condition typically presents in neonates with poor feeding and/or seizures.

* CHARGE syndrome is a disorder that affects many areas of the body. CHARGE is an abbreviation for several of the features common in the disorder: coloboma, heart defects, atresia choanae (also known as choanal atresia), growth retardation, genital abnormalities, and ear abnormalities. The pattern of malformations varies among individuals with this disorder, and the multiple health problems can be life-threatening in infancy. Most individuals with CHARGE syndrome have a gap or hole in one of the structures of the eye (coloboma), which forms during early development. A coloboma may be present in one or both eyes and may impair a person's vision, depending on its size and location. Some affected individuals also have abnormally small or underdeveloped eyes (microphthalmia). In many people with CHARGE syndrome, one or both nasal passages are narrowed (choanal stenosis) or completely blocked (choanal atresia), which can cause difficulty breathing. Affected individuals frequently have cranial nerve abnormalities. Abnormal function of certain cranial nerves can cause

swallowing problems, facial paralysis, a sense of smell that is diminished (hyposmia) or completely absent (anosmia), and mild to profound hearing loss. People with CHARGE syndrome also typically have middle and inner ear abnormalities, which can contribute to hearing problems, and unusually shaped external ears. Most people with CHARGE syndrome also have distinctive facial features, including a square-shaped face and differences in appearance between the right and left sides of the face (facial asymmetry). Affected individuals have a wide range of cognitive function, from normal intelligence to major learning disabilities with absent speech and poor communication. Less common features of CHARGE syndrome include kidney abnormalities; immune system problems; abnormal curvature of the spine (scoliosis or kyphosis); and limb abnormalities, such as extra fingers or toes (polydactyly), missing fingers or toes (oligodactyly), an inward and upward turning foot (club foot), and abnormalities of the long bones of the arms and legs.

* Dysostosis Cleidocranial, also called cleidocranial dysplasia, is a birth defect that mostly affects the bones and teeth. The collarbones are typically either poorly developed or absent, which allows the shoulders to be brought close together. The front of the skull often does not close until later, and those affected are often shorter than average. Other symptoms may include a prominent forehead, wide set eyes, abnormal teeth, and a flat nose. Symptoms vary among people; however, intelligence is typically unaffected.

* Dysostosis Craniofacial also known as Crouzon syndrome, is a complex genetic birth disorder that may affect a child’s face, skull, and teeth. In a child with this syndrome, premature fusion of certain skull bones (craniosynostosis) prevents the skull from growing normally and affects the shape of the head and face; sometimes causing increased pressure around the brain. A defining characteristic of Crouzon syndrome is craniosynostosis, which results in an abnormal head shape. Exophthalmos (bulging eyes due to shallow eye sockets after early fusion of surrounding bones), hypertelorism (greater than normal distance between the eyes), and psittichorhina (beak-like nose) are also very common features. Other facial characteristics that are present in many cases include external strabismus and hypoplastic maxilla (insufficient growth of the midface), which results in relative mandibular prognathism (protruding chin) and gives the effect of the patient having a concave face. It is the most common craniostenosis syndrome.

* Ehrlichiosis is a group of infections caused by several forms of the bacterium Ehrlichia. Ticks transmit the bacteriaum (and other infections such as Rocky Mountain spotted fever or Lyme disease) to humans through bites on the skin. Without treatment, this infection may cause serious complications. However, ehrlichiosis does not become a chronic (ongoing) condition. People with ehrlichiosis will often have fever, chills, headache, muscle aches, and sometimes upset stomach. In people with other significant health problems, or if the infection is not treated, the symptoms and illness may be more severe.

* Eisenmenger syndrome (ES) refers to the combination of a type of high blood

pressure that affects the blood vessels of the lungs and heart (pulmonary hypertension), and abnormal blood flow through the heart. ES most often occurs in people who are born with a heart defect (congenital heart defect) that does not get repaired in childhood. The most common type of heart defect associated with Eisenmenger syndrome is a ‘hole in the heart’ or ventricular septal defect, but other types of heart defects can lead to Eisenmenger syndrome. The symptoms include blueish skin color (cyanosis), rounded fingers and toes (clubbing), and shortness of breath. The symptoms of ES typically get worse over time. Eisenmenger syndrome is not inherited in families. It is diagnosed based on the symptoms in a person with a heart defect that has not been repaired.

* Fascioliasis is infection with the liver fluke Fasciola hepatica, which is acquired by eating contaminated watercress or other water plants. Clinical manifestations include abdominal pain and hepatomegaly. Flukes are parasitic flatworms that infect various parts of the body (eg, blood vessels, gastrointestinal tract, lungs, liver) depending on the species. Incidental human fascioliasis, acquired by eating watercress contaminated by sheep or cattle dung, occurs in Europe, Africa, China, and South America but is rare in the US. Acute infection can cause abdominal pain, hepatomegaly, nausea, vomiting, intermittent fever, urticaria, malaise, and weight loss due to liver damage. Chronic infection may be asymptomatic or lead to intermittent abdominal pain, cholelithiasis, cholangitis, obstructive jaundice, or pancreatitis. Heavy infection can cause sclerosing cholangitis and biliary cirrhosis. Ectopic lesions may occur in the intestinal wall, lungs, or other organs. Pharyngeal fascioliasis that results in dysphagia has been reported after consumption of infected raw liver in the Middle East; this infection is called halzoun.

* Granulomatosis Lipid or Erdheim-Chester disease, is a rare type of slow-growing blood cancer called a histiocytic neoplasm, which results in overproduction of cells called histiocytes. Histiocytes normally function to destroy foreign substances and protect the body from infection. In Erdheim-Chester disease, the excess production of histiocytes (histiocytosis) leads to inflammation that can damage organs and tissues throughout the body, causing them to become thickened, dense, and scarred (fibrotic); this tissue damage may lead to organ failure. People with Erdheim-Chester disease often have bone pain, especially in the lower legs and upper arms, due to an abnormal increase in bone density (osteosclerosis). Damage to the pituitary gland (a structure at the base of the brain that produces several hormones, including a hormone that controls the amount of water released in the urine) may result in hormonal problems such as a condition called diabetes insipidus that leads to excessive urination. Abnormally high pressure of the cerebrospinal fluid within the skull (intracranial hypertension) caused by accumulation of histiocytes in the brain may result in headaches, seizures, cognitive impairment, or problems with movement or sensation. People with this condition can also have shortness of breath, heart or kidney disease, protruding eyes (exophthalmos), skin growths, or inability to conceive a child (infertility). Affected individuals may also experience fever, night sweats, fatigue, weakness, and weight loss. The signs and symptoms of Erdheim-Chester disease usually appear between the ages of 40 and 60, although the disorder can occur at any age. The severity of the condition varies widely;

some affected individuals have few or no associated health problems, while others have severe complications that can be life-threatening.

* Hexosaminidase-A Deficiency or Tay-Sachs disease is a rare, inherited disease. It is a type of lipid metabolism disorder. It causes too much of a fatty substance to build up in the brain. This buildup destroys nerve cells, causing mental and physical problems. Infants with Tay-Sachs disease appear to develop normally for the first few months of life. Then mental and physical abilities decline. The child becomes blind, deaf, and unable to swallow. Muscles begin to waste away and paralysis sets in. Even with the best of care, children with Tay-Sachs disease usually die by age 4. Juvenile Tay–Sachs disease is rarer than other forms of Tay–Sachs, and usually is initially seen in children between two and ten years old. People with Tay–Sachs disease experience cognitive and motor skill deterioration, dysarthria, dysphagia, ataxia, and spasticity. Death usually occurs between the ages of five and fifteen years. A rare form of this disease, known as Adult-Onset or Late-Onset Tay–Sachs disease, usually has its first symptoms during the 30s or 40s. In contrast to the other forms, late-onset Tay–Sachs disease is usually not fatal as the effects can stop progressing. It is frequently misdiagnosed. It is characterized by unsteadiness of gait and progressive neurological deterioration. People with late-onset Tay–Sachs may become full-time wheelchair users in adulthood.

* Hexosaminidase-B Deficiency or Sandhoff disease is a rare inherited disorder that progressively destroys nerve cells (neurons) in the brain and spinal cord. The most common and severe form of Sandhoff disease becomes apparent in infancy. Infants with this disorder typically appear normal until the age of 3 to 6 months, when their development slows and muscles used for movement weaken. Affected infants lose motor skills such as turning over, sitting, and crawling. They also develop an exaggerated startle reaction to loud noises. As the disease progresses, children with Sandhoff disease experience seizures, vision and hearing loss, intellectual disability, and paralysis. An eye abnormality called a cherry-red spot, which can be identified with an eye examination, is characteristic of this disorder. Some affected children also have enlarged organs (organomegaly) or bone abnormalities. Children with the severe infantile form of Sandhoff disease usually live only into early childhood. Other forms of Sandhoff disease are very rare. Signs and symptoms can begin in childhood, adolescence, or adulthood and are usually milder than those seen with the infantile form. Characteristic features include muscle weakness, loss of muscle coordination (ataxia) and other problems with movement, speech problems, and mental illness. These signs and symptoms vary widely among people with late-onset forms of Sandhoff disease.

* Kallmann syndrome (KS) is a genetic disorder that prevents a person from starting or fully completing puberty. Kallmann syndrome is a form of a group of conditions termed hypogonadotropic hypogonadism. To distinguish it from other forms of hypogonadotropic hypogonadism, Kallmann syndrome has the additional symptom of a total lack of sense of smell (anosmia) or a reduced sense of smell. If left untreated, people will have poorly defined secondary sexual characteristics, show signs of hypogonadism, almost invariably are infertile and are at increased risk of developing

osteoporosis. A range of other physical symptoms affecting the face, hands and skeletal system can also occur. The underlying cause is a failure in the correct production or activity of gonadotropin-releasing hormone by the hypothalamus. This results in low levels of the sex hormones testosterone in males or oestrogen and progesterone in females. Diagnosis normally occurs during teenage years when puberty fails to start.

* Leukodystrophy Metachromatic is an inherited disorder characterized by the accumulation of fats called sulfatides in cells. This accumulation especially affects cells in the nervous system that produce myelin, the substance that insulates and protects nerves. Nerve cells covered by myelin make up a tissue called white matter. Sulfatide accumulation in myelin-producing cells causes progressive destruction of white matter (leukodystrophy) throughout the nervous system, including in the brain and spinal cord (the central nervous system) and the nerves connecting the brain and spinal cord to muscles and sensory cells that detect sensations such as touch, pain, heat, and sound (the peripheral nervous system). In people with metachromatic leukodystrophy, white matter damage causes progressive deterioration of intellectual functions and motor skills, such as the ability to walk. Affected individuals also develop loss of sensation in the extremities (peripheral neuropathy), incontinence, seizures, paralysis, an inability to speak, blindness, and hearing loss. Eventually they lose awareness of their surroundings and become unresponsive. While neurological problems are the primary feature of metachromatic leukodystrophy, effects of sulfatide accumulation on other organs and tissues have been reported, most often involving the gallbladder. Like many other genetic disorders that affect lipid metabolism, there are several forms of Leukodystrophy Metachromatic, which are late infantile, juvenile, and adult.

* Leukodystrophy Spongiform or Canavan disease is a rare inherited disorder that damages the ability of nerve cells (neurons) in the brain to send and receive messages. This disease is one of a group of genetic disorders called leukodystrophies. Leukodystrophies disrupt the growth or maintenance of the myelin sheath, which is the covering that protects nerves and promotes the efficient transmission of nerve impulses. Neonatal/infantile Canavan disease is the most common and most severe form of the condition. Affected infants appear normal for the first few months of life, but by age 3 to 5 months, problems with development become noticeable. These infants usually do not develop motor skills such as turning over, controlling head movement, and sitting without support. Other common features of this condition include weak muscle tone (hypotonia), an unusually large head size (macrocephaly), and irritability. Feeding and swallowing difficulties, seizures, and sleep disturbances may also develop. The mild/juvenile form of Canavan disease is less common. Affected individuals have mildly delayed development of speech and motor skills starting in childhood. These delays may be so mild and nonspecific that they are never recognized as being caused by Canavan disease. The life expectancy for people with Canavan disease varies. Most people with the neonatal/infantile form live only into childhood, although some survive into adolescence or beyond. People with the mild/juvenile form do not appear to have a shortened lifespan.

* Molluscum Contagiosum is a viral skin infection that causes raised, pearl-like papules

or nodules on the skin. Molluscum contagiosum is caused by a virus that is a member of the poxvirus family. This is a common infection in children and occurs when a child comes into direct contact with a skin lesion or an object that has the virus on it. (A skin lesion is an abnormal area of skin.) The infection is most often seen on the face, neck, armpit, arms, and hands. However, it can occur anywhere on the body, except it is rarely seen on the palms and soles. The virus can spread through contact with contaminated objects, such as towels, clothing, or toys. The virus also spreads by sexual contact. Early lesions on the genitals may be mistaken for herpes or warts. Unlike herpes, these lesions are painless. Persons with a weakened immune system (due to conditions such as HIV/AIDS) or severe eczema may have a rapidly spreading case of molluscum contagiosum. The infection on the skin begins as a small, painless papule, or bump. It may become raised to a pearly, flesh-colored nodule. The papule often has a dimple in the center. Scratching or other irritation causes the virus to spread in a line or in groups, called crops. The papules are about 2 to 5 millimeters wide. Usually, there is no inflammation (swelling and redness) and no redness unless they have been irritated by rubbing or scratching. In adults, the lesions are commonly seen on the genitals, abdomen, and inner thigh.

* Nail-patella syndrome causes changes in the nails, elbows, kneecaps (patellae), and hip bone. The most common symptom of the syndrome is having missing or underdeveloped fingernails and toenails. Other symptoms may include having small or missing kneecaps, underdeveloped elbows, and an extra small piece of bone on both sides of the hip (called iliac horns). People with nail-patella syndrome are at an increased risk for developing high fluid pressure in the eye (glaucoma) and kidney disease. Nail-patella syndrome is caused by genetic changes (pathogenic variants or mutations) in the LMX1B gene. The syndrome is inherited in an autosomal dominant manner.

* Neuroblastoma (alternate to Cancer-Neuroblastoma?)

* Periodic disease also known as Familial Mediterranean fever (FMF), 'periodic peritonitis,' 'familial paroxysmal polyserositis,' 'periodic disease,' 'Siegal-Cattan-Mamou disease,' 'Wolff periodic disease' or 'Reimann syndrome' is an autoinflammatory genetic disorder that causes recurrent fevers and serosal inflammation of the abdomen, lungs, and joints leading to severe pain. The first attack frequently occurs in childhood, and it usually begins before the age of 20 years. All attacks develop over 2 to 4 hours and last anywhere from 6 hours to 4 days. Sometimes it is accompanied by a rash or headache. This hereditary disease represents the most common of the periodic fever syndromes and is named FMF because it mainly affects the people of Mediterranean and Middle Eastern origin. Although FMF and other familial periodic fever syndromes were only described in the second half of the twentieth century, descriptions of periodic fevers can be found since antiquity. Although the attacks tend to resolve spontaneously, FMF has an important clinical significance. Without treatment to help prevent attacks, the disease can result in serious secondary amyloidosis damage, especially in the kidneys, with the potential development of kidney failure.

* Periodic Paralysis Familial or Normokalemic periodic paralysis (NormoKPP) is similar to hyperkalemic or hypokalemic periodic paralysis, but it’s not quite the same. Periodic paralysis is a rare genetic disorder that is characterized by temporary attacks of extreme muscle weakness or paralysis. These attacks can be triggered by a variety of things, with the most common triggers being resting after exercise, cold temperatures, and having too much or too little potassium. Periodic paralysis is caused by muscle cells that do not have the right balance of chemicals to work properly. Muscle cells have openings called channels that open and close to let particles such as sodium, potassium, and calcium go in and out. These particles are called ions, and muscle cells can only work if the right kinds of ions enter and exit the cells at the right times. When the channels don’t open and close the way they’re supposed to, the ions become imbalanced, and muscles aren’t able to function normally. Normokalemic periodic paralysis (NormoPP or NormoKPP) is a rare form of a rare disorder. Scientists are still pinning down exactly what it is and what causes it. In many cases, it is a variant of hyperkalemic periodic paralysis and both disorders are caused by the same sodium channel mutation. However, there are some cases in which it is a variant of hypokalemic periodic paralysis and the cause is a calcium channel mutation. It’s difficult to fully define this unusual disorder, but one key fact about it is that in normokalemic patients, blood potassium levels stay normal during attacks instead of rising (hyperkalemic) or falling (hypokalemic).

* Progeria is a specific type of progeroid syndrome, also known as Hutchinson-Gilford syndrome. Progeroid syndromes are a group of diseases that cause victims to age faster than usual, leading to them appearing older than they are. Patients born with progeria typically live to an age of mid-teens to early twenties. Severe cardiovascular complications usually develop by puberty, resulting in death. Children with progeria usually develop the first symptoms during their first few months of life. The earliest symptoms may include a failure to thrive and a localized scleroderma-like skin condition. As a child ages past infancy, additional conditions become apparent, usually around 18–24 months. Limited growth, full-body alopecia (hair loss), and a distinctive appearance (a small face with a shallow recessed jaw and a pinched nose) are all characteristics of progeria. Signs and symptoms of this progressive disease tend to become more marked as the child ages.

* Progeria Adult or Werner syndrome is characterized by the dramatic, rapid appearance of features associated with normal aging. Individuals with this disorder typically grow and develop normally until they reach puberty. Affected teenagers usually do not have a growth spurt, resulting in short stature. The characteristic aged appearance of individuals with Werner syndrome typically begins to develop when they are in their twenties and includes graying and loss of hair; a hoarse voice; and thin, hardened skin. They may also have a facial appearance described as "bird-like." Many people with Werner syndrome have thin arms and legs and a thick trunk due to abnormal fat deposition. As Werner syndrome progresses, affected individuals may develop disorders of aging early in life, such as cloudy lenses (cataracts) in both eyes, skin ulcers, type 2 diabetes, diminished fertility, severe hardening of the arteries (atherosclerosis), thinning of the bones (osteoporosis), and some types of cancer. It is

not uncommon for affected individuals to develop multiple, rare cancers during their lifetime. People with Werner syndrome usually live into their late forties or early fifties. The most common causes of death are cancer and atherosclerosis.

* Pseudo-Gaucher Disease patients, unlike Gaucher Disease patients present fatal left sided valvular stenosis with calcification, corneal opacities, and supranuclear ophthalmoplegia. Also, communicating hydrocephalus, sensorineural deafness, and deformed toes.

* Toxoplasmosis is a parasitic disease caused by Toxoplasma gondii, an apicomplexan. Infections with toxoplasmosis usually cause no obvious symptoms in adults. Occasionally, people may have a few weeks or months of mild, flu-like illness such as muscle aches and tender lymph nodes. In a small number of people, eye problems may develop. In those with a weak immune system, severe symptoms such as seizures and poor coordination may occur. If a woman becomes infected during pregnancy, a condition known as congenital toxoplasmosis may affect the child. Toxoplasmosis is usually spread by eating poorly cooked food that contains cysts, exposure to infected cat feces, and from an infected mother to her baby during pregnancy. Up to half of the world's population is infected by toxoplasmosis, but have no symptoms. Swollen lymph nodes are commonly found in the neck or under the chin, followed by the armpits and the groin. Swelling may occur at different times after the initial infection, persist, and recur for various times independently of antiparasitic treatment. It is usually found at single sites in adults, but in children, multiple sites may be more common. Enlarged lymph nodes will resolve within 1–2 months in 60% of cases. However, a quarter of those affected take 2–4 months to return to normal, and 8% take 4–6 months. A substantial number (6%) do not return to normal until much later. The latent state of infection has recently been associated with numerous disease burdens, neural alterations, and subtle gender-dependent behavioral changes in immunocompetent humans, as well as a increased risk of motor vehicle collisions.

* Trichinosis is a parasitic disease caused by eating meat that has not been thoroughly cooked and contains cysts (larvae, or immature worms) of Trichinella spiralis. This parasite can be found in pig, bear, walrus, fox, rat, horse, and lion. When a person eats meat from an infected animal, trichinella cysts break open in the intestine and grow into adult roundworms. The roundworms produce other worms that move through the gut wall and into the bloodstream. The worms invade muscle tissues, including the heart and diaphragm (the breathing muscle under the lungs). They can also infect the lungs and brain. The cysts remain alive for years. Symptoms of trichinosis include: Abdominal discomfort, cramping, diarrhea, facial swelling around the eyes, fever, muscle pain (especially muscle pain with breathing, chewing, or using large muscles), muscle weakness.

1.1.30 RTS-22

https://archive.org/details/Resonant_Therapy_Sessions_22

African Lymphoma; Borna Disease; Cancer-Pheochromocytoma; Cancer-Plasma Cell Neoplasm; Cancer-Rhabdomyosarcoma; Cortical Hyperostosis Congenital; Craniopharyngioma; DiGeorge Syndrome; Exfoliation Syndrome; Galactosylceramidase Deficiency; Holt-Oram Syndrome; Kearns Syndrome; Legionellosis; Mesothelioma; Morgellons Internal Parasites; Morgellons Chronic-Ruptures and Fibre growths; Neuronal Ceroid-Lipofuscinoses; Ornithosis; Pheochromocytoma; Phytanic Acid Storage Disease; Puppet Children; Rhabdoid Tumor; Rhabdomyosarcoma; Rift Valley Fever; Robinow Syndrome; Scarlet Fever; Scheuermann Disease; Schnitzler Syndrome; Sprengel Deformity; Stickler Syndrome

* African Lymphoma or Burkitt lymphoma is a cancer of the lymphatic system, particularly B lymphocytes found in the germinal center. The overall cure rate for Burkitt lymphoma in developed countries is about 90%, but worse in low-income countries. Burkitt lymphoma is uncommon in adults, in whom it has a worse prognosis.People with HIV/AIDS have an increased risk for this condition. BL is most often seen in males. Burkitt lymphoma (BL) is a very fast growing form of non-Hodgkin lymphoma. BL was first discovered in children in certain parts of Africa. It also occurs in the United States. The African type of BL is closely associated with the Epstein-Barr virus (EBV), the main cause of infectious mononucleosis. The North American form of BL is not linked to EBV. BL may first be noticed as a swelling of the lymph nodes (glands) in the head and neck. These swollen lymph nodes are often painless, but can grow very rapidly. In the types commonly seen in the United States, the cancer often starts in the belly area (abdomen). The disease can also start in the ovaries, testes, brain, kidneys, liver, and spinal fluid. Other general symptoms may include: Fever, night sweats, unexplained weight loss.

* Borna disease is an infectious neurological syndrome of warm-blooded animals, caused by Borna disease viruses 1 and 2 . BoDV-1 and 2 cause abnormal behaviour and fatality. Borna disease viruses 1 and 2 are neurotropic viruses and members of the Bornaviridae family within the Mononegavirales order. Although Borna disease viruses 1 and 2 are mainly seen as the causative agent of Borna disease in horses and other animals, they are also controversially discussed as human infectious agents and therefore as potential zoonotic agents. Borna virus has been detected in humans, and researchers have presented evidence connecting these infections with psychiatric disorders. The mode of transmission of BoDV-1/2 is unclear but probably occurs through intranasal exposure to contaminated saliva or nasal secretions. Following infection, individuals may develop Borna disease, or may remain subclinical, possibly acting as a carrier of the virus. Borna diseases viruses 1 and 2 appear to have wide host ranges, having been detected in horses, cattle, sheep, cats, dogs and foxes.

* Cancer-Pheochromocytoma is a rare tumor that usually starts in the cells of one of your adrenal glands. Although they are usually benign, pheochromocytomas often

cause the adrenal gland to make too many hormones. This can lead to high blood pressure and cause symptoms such as : Headaches, sweating, pounding of the heart, being shaky, being extremely pale. Sometimes pheochromocytoma is part of another condition called multiple endocrine neoplasia syndrome (MEN). People with MEN often have other cancers and other problems involving hormones.

* Cancer-Plasma Cell Neoplasm. Plasma cell neoplasms are diseases in which abnormal plasma cells or cells form tumors in the bones or soft tissues of the body. The plasma cells also make an antibody protein, called M protein, that is not needed by the body and does not help fight infection. These antibody proteins build up in the bone marrow and can cause the blood to thicken or can damage the kidneys. Plasma cell neoplasms can be benign (not cancer) or malignant (cancer).

* Cancer-Rhabdomyosarcoma is a cancerous (malignant) tumor of the muscles that are attached to the bones. This cancer mostly affects children. Rhabdomyosarcoma can occur in many places in the body. The most common sites are the head or neck, the urinary or reproductive system, and the arms or legs. The cause of rhabdomyosarcoma is unknown. Some children with certain birth defects are at an increased risk. Some families have a gene mutation that increases this risk. Most children with rhabdomyosarcoma do not have any known risk factors. The most common symptom is a mass that may or may not be painful. Other symptoms vary depending on location of the tumor.

* Cortical Hyperostosis Congenital also Caffey disease, is a bone disorder that most often occurs in babies. Excessive new bone formation (hyperostosis) is characteristic of Caffey disease. The bone abnormalities mainly affect the jawbone, shoulder blades (scapulae), collarbones (clavicles), and the shafts (diaphyses) of long bones in the arms and legs. Affected bones may double or triple in width, which can be seen by x-ray imaging. In some cases two bones that are next to each other, such as two ribs or the pairs of long bones in the forearms (radius and ulna) or lower legs (tibia and fibula) become fused together. Babies with Caffey disease also have swelling of joints and of soft tissues such as muscles, with pain and redness in the affected areas. Affected infants can also be feverish and irritable. The signs and symptoms of Caffey disease are usually apparent by the time an infant is 5 months old. In rare cases, skeletal abnormalities can be detected by ultrasound imaging during the last few weeks of development before birth. Lethal prenatal cortical hyperostosis, a more severe disorder that appears earlier in development and is often fatal before or shortly after birth, is sometimes called lethal prenatal Caffey disease; however, it is generally considered to be a separate disorder. For unknown reasons, the swelling and pain associated with Caffey disease typically go away within a few months. Through a normal process called bone remodeling, which replaces old bone tissue with new bone, the excess bone is usually reabsorbed by the body and undetectable on x-ray images by the age of 2. However, if two adjacent bones have fused, they may remain that way, possibly resulting in complications. For example, fusedMost people with Caffey disease have no further problems related to the disorder after early childhood. Occasionally, another episode of hyperostosis occurs years later. In addition, some adults who had Caffey

disease in infancy have other abnormalities of the bones and connective tissues, which provide strength and flexibility to structures throughout the body. Affected adults may have loose joints (joint laxity), stretchy (hyperextensible) skin, or be prone to protrusion of organs through gaps in muscles (hernias). rib bones can lead to curvature of the spine (scoliosis) or limit expansion of the chest, resulting in breathing problems.

* Craniopharyngioma is a rare type of brain tumor derived from pituitary gland embryonic tissue that occurs most commonly in children, but also affects adults. It may present at any age, even in the prenatal and neonatal periods, but peak incidence rates are childhood-onset at 5–14 years and adult-onset at 50–74 years. Craniopharyngioma causes symptoms by: Increasing pressure on the brain, usually from hydrocephalus, disrupting hormone production by the pituitary gland, pressure or damage to the optic nerve. Increased pressure on the brain can cause: Headache, nausea, vomiting (especially in the morning). Damage to the pituitary gland causes hormone imbalances that can lead to excessive thirst and urination, and slow growth. When the optic nerve is damaged by the tumor, vision problems develop. These defects are often permanent. They may get worse after surgery to remove the tumor. Behavioral and learning problems may be present.

* DiGeorge syndrome (DGS) also known as 22q11.2 deletion syndrome, is a primary immunodeficiency disease (PIDD) associated with susceptibility to infections due to decreased T cell production and function due to an absent or poorly developed thymus. The thymus is the “school house” where T-cells are educated to fight infection and prevent autoimmunity. DGS is caused by abnormal cell and tissue development during fetal growth. In addition to possible immune system problems, this abnormal development can result in altered facial characteristics, abnormal gland development (parathyroid or thyroid) or heart defects. DGS is a lifelong condition that is typically diagnosed in infancy or early childhood. Children with DGS differ in the organs and tissues affected, as well as in the severity of the disease. The presentation of DGS varies. At one end of the spectrum is “Complete DGS” that is associated with total absence of the thymus and a severe deficiency in T-cells that requires thymic transplantation for survival. “Partial DGS” is associated with low, but not absent T-cell function and often improves during childhood. Still, approximately one-third of affected adults will have mild recurrent infections.Certain facial features are often seen with DGS - low set ears, underdeveloped chin, a short philtrum (the vertical groove on the upper lip), a bulbous nose tip, heavy eyelids and/or a small mouth. Nasal-sounding speech can occur when a cleft palate is involved. Short stature, learning difficulties or certain psychiatric disorders are also common. Based on which organs are affected by the syndrome, other symptoms may include: Frequent infections, low calcium levels, heart defects.

* Exfoliation Syndrome or exfoliation glaucoma (also called pseudoexfoliation, glaucoma capsulare) is a type of open-angle glaucoma that happens in some people with exfoliation syndrome, a condition that causes extra material to deposit on parts of the eye and block fluid from draining. It is an aging-related systemic disease manifesting itself primarily in the eyes. Recent research shows that genetics may play a role in

exfoliation glaucoma. You’re at higher risk if someone else in your family has exfoliation glaucoma. This type of glaucoma can progress faster than primary open-angle glaucoma, and often causes higher eye pressure. Patients may have no specific symptoms. In some cases, patients may complain of lessened visual acuity or changes in their perceived visual field, and such changes may be secondary to or different from symptoms normally associated with cataracts or glaucoma.

* Galactosylceramidase Deficiency or Krabbe disease is a rare genetic disorder of the nervous system. It is a type of brain disease called leukodystrophy. A defect in the GALC gene causes Krabbe disease. People with this gene defect do not make enough of a substance (enzyme) called galactocerebroside beta-galactosidase (galactosylceramidase). The body needs this enzyme to make myelin. Myelin surrounds and protects nerve fibers. Without this enzyme, myelin breaks down, brain cells die, and nerves in the brain and other body areas do not work properly. Krabbe disease can develop at various ages: Early-onset Krabbe disease appears in the first months of life. Most children with this form of the disease die before they reach age 2. Late-onset Krabbe disease begins in late childhood or early adolescence. Krabbe disease is inherited, which means it is passed down through families. If both parents carry the nonworking copy of the gene related to this condition, each of their children has a 25% (1 in 4) chance of developing the disease. It is an autosomal recessive disorder. This condition is very rare. It is most common among people of Scandinavian descent.

* Holt-Oram syndrome is characterized by skeletal abnormalities of the hands and arms (upper limbs) and heart problems. People with Holt-Oram syndrome have abnormally developed bones in their upper limbs. At least one abnormality in the bones of the wrist (carpal bones) is present in affected individuals. Often, these wrist bone abnormalities can be detected only by x-ray. Individuals with Holt-Oram syndrome may have additional bone abnormalities including a missing thumb, a long thumb that looks like a finger, partial or complete absence of bones in the forearm, an underdeveloped bone of the upper arm, and abnormalities of the collar bone or shoulder blades. These skeletal abnormalities may affect one or both of the upper limbs. If both upper limbs are affected, the bone abnormalities can be the same or different on each side. In cases where the skeletal abnormalities are not the same on both sides of the body, the left side is usually more severely affected than the right side. About 75 percent of individuals with Holt-Oram syndrome have heart (cardiac) problems, which can be life-threatening. The most common problem is a defect in the muscular wall (septum) that separates the right and left sides of the heart. A hole in the septum between the upper chambers of the heart (atria) is called an atrial septal defect (ASD), and a hole in the septum between the lower chambers of the heart (ventricles) is called a ventricular septal defect (VSD). Some people with Holt-Oram syndrome have cardiac conduction disease, which is caused by abnormalities in the electrical system that coordinates contractions of the heart chambers. Cardiac conduction disease can lead to problems such as a slower-than-normal heart rate (bradycardia) or a rapid and uncoordinated contraction of the heart muscle (fibrillation). Cardiac conduction disease can occur along with other heart defects (such as ASD or VSD) or as the only heart problem in people with Holt-Oram syndrome. The features of Holt-Oram syndrome are similar to those of a condition

called Duane-radial ray syndrome; however, these two disorders are caused by mutations in different genes.

* Kearns Syndrome or Kearns-Sayre syndrome is a condition that affects many parts of the body, especially the eyes. The features of Kearns-Sayre syndrome usually appear before age 20, and the condition is diagnosed by a few characteristic signs and symptoms. People with Kearns-Sayre syndrome have progressive external ophthalmoplegia, which is weakness or paralysis of the eye muscles that impairs eye movement and causes drooping eyelids (ptosis). Affected individuals also have an eye condition called pigmentary retinopathy, which results from breakdown (degeneration) of the light-sensing tissue at the back of the eye (the retina) that gives it a speckled and streaked appearance. The retinopathy may cause loss of vision. In addition, people with Kearns-Sayre syndrome have at least one of the following signs or symptoms: abnormalities of the electrical signals that control the heartbeat (cardiac conduction defects), problems with coordination and balance that cause unsteadiness while walking (ataxia), or abnormally high levels of protein in the fluid that surrounds and protects the brain and spinal cord (the cerebrospinal fluid or CSF). People with Kearns-Sayre syndrome may also experience muscle weakness in their limbs, deafness, kidney problems, or a deterioration of cognitive functions (dementia). Affected individuals often have short stature. In addition, diabetes mellitus is occasionally seen in people with Kearns-Sayre syndrome. When the muscle cells of affected individuals are stained and viewed under a microscope, these cells usually appear abnormal. The abnormal muscle cells contain an excess of structures called mitochondria and are known as ragged-red fibers. A related condition called ophthalmoplegia-plus may be diagnosed if an individual has many of the signs and symptoms of Kearns-Sayre syndrome but not all the criteria are met.

* Legionellosis or Legionnaires' disease is a type of pneumonia caused by bacteria. You usually get it by breathing in mist from water that contains the bacteria. The mist may come from hot tubs, showers, or air-conditioning units for large buildings. The bacteria don't spread from person to person. Symptoms of Legionnaires' disease include high fever, chills, a cough, and sometimes muscle aches and headaches. Other types of pneumonia have similar symptoms. Most people exposed to the bacteria do not become sick. You are more likely to get sick if you: Are older than 50, smoke, have a chronic lung disease, have a weak immune system. Legionnaires' disease is serious and can be life-threatening.

* Mesothelioma. The tissue that lines your lungs, stomach, heart, and other organs is called mesothelium. Mesothelioma, also known as malignant mesothelioma, is cancer of that tissue. It usually starts in the lungs, but can also start in the abdomen or other organs. Malignant mesothelioma is rare but serious. Most people who get it have worked on jobs where they inhaled asbestos particles. After being exposed to asbestos, it usually takes a long time for the disease to form. Symptoms include: Trouble breathing, pain under the rib cage, pain, swelling, or lumps in the abdomen, weight loss for no known reason. Sometimes it is hard to tell the difference between malignant mesothelioma and lung cancer.

* Morgellons Internal Parasites. Morgellons disease is an uncommon, poorly understood condition characterized by small fibers or other particles emerging from skin sores. People with this condition often report feeling as if something were crawling on or stinging their skin. People who have Morgellons disease report the following signs and symptoms: Skin rashes or sores that can cause intense itching, crawling sensations on and under the skin, often compared to insects moving, stinging or biting, fibers, threads or black stringy material in and on the skin. fatigue, difficulty concentrating, short-term memory loss, depressed mood. The intense itching and open sores associated with Morgellons disease can severely interfere with a person's quality of life.

* Morgellons Chronic-Ruptures and Fibre growths. Morgellons disease is an uncommon, poorly understood condition characterized by small fibers or other particles emerging from skin sores. People with this condition often report feeling as if something were crawling on or stinging their skin. People who have Morgellons disease report the following signs and symptoms: Skin rashes or sores that can cause intense itching, crawling sensations on and under the skin, often compared to insects moving, stinging or biting, fibers, threads or black stringy material in and on the skin. fatigue, difficulty concentrating, short-term memory loss, depressed mood. The intense itching and open sores associated with Morgellons disease can severely interfere with a person's quality of life.

* Neuronal ceroid lipofuscinoses (NCL) refers to a group of rare disorders of the nerve cells. NCL is passed down through families (inherited). These are the three main types of NCL: Adult (Kufs or Parry disease). Juvenile (Batten disease). Late infantile (Jansky-Bielschowsky disease). NCL involves the buildup of an abnormal material called lipofuscin in the brain. NCL is thought to be caused by problems with the brain's ability to remove and recycle proteins. Lipofuscinoses are inherited as autosomal recessive traits. This means each parent passes on a nonworking copy of the gene for the child to develop the condition. Symptoms of NCL include: Abnormally increased muscle tone or spasm, blindness or vision problems, dementia, lack of muscle coordination, intellectual disability, movement disorder, loss of speech, seizures, unsteady walk.

* Ornithosis (also known as Psittacosis and parrot fever) is a zoonotic infectious disease in humans caused by a bacterium called Chlamydia psittaci and contracted from infected parrots, such as macaws, cockatiels, and budgerigars, and from pigeons, sparrows, ducks, hens, gulls and many other species of birds. The incidence of infection in canaries and finches is believed to be lower than in psittacine birds. Psittacosis infection develops when you breathe in (inhale) the bacteria. People between 30 to 60 years are commonly affected. The incubation period of psittacosis is of 5 to 15 days. The incubation period is the time it takes for symptoms to appear after being exposed to the bacteria. Symptoms may include: Blood-tinged sputum, dry cough, fatigue, fever and chills, headache, joint aches, muscle aches (most often in the head and neck), shortness of breath, diarrhea, swelling in the back of the throat (pharyngitis), swelling of the liver, confusion.

* Pheochromocytoma (alternate to Cancer-Pheochromocytoma?)

* Phytanic Acid Storage Disease or Refsum disease is an inherited condition that causes vision loss, absence of the sense of smell (anosmia), and a variety of other signs and symptoms. The vision loss associated with Refsum disease is caused by an eye disorder called retinitis pigmentosa. This disorder affects the retina, the light-sensitive layer at the back of the eye. Vision loss occurs as the light-sensing cells of the retina gradually deteriorate. The first sign of retinitis pigmentosa is usually a loss of night vision, which often becomes apparent in childhood. Over a period of years, the disease disrupts side (peripheral) vision and may eventually lead to blindness. Vision loss and anosmia are seen in almost everyone with Refsum disease, but other signs and symptoms vary. About one-third of affected individuals are born with bone abnormalities of the hands and feet. Features that appear later in life can include progressive muscle weakness and wasting; poor balance and coordination (ataxia); hearing loss; and dry, scaly skin (ichthyosis). Additionally, some people with Refsum disease develop an abnormal heart rhythm (arrhythmia) and related heart problems that can be life-threatening.

* Puppet Children or Angelman syndrome is a complex genetic disorder that primarily affects the nervous system. Characteristic features of this condition include delayed development, intellectual disability, severe speech impairment, and problems with movement and balance (ataxia). Most affected children also have recurrent seizures (epilepsy) and a small head size (microcephaly). Delayed development becomes noticeable by the age of 6 to 12 months, and other common signs and symptoms usually appear in early childhood. Children with Angelman syndrome typically have a happy, excitable demeanor with frequent smiling, laughter, and hand-flapping movements. Hyperactivity, a short attention span, and a fascination with water are common. Most affected children also have difficulty sleeping and need less sleep than usual. With age, people with Angelman syndrome become less excitable, and the sleeping problems tend to improve. However, affected individuals continue to have intellectual disability, severe speech impairment, and seizures throughout their lives. Adults with Angelman syndrome have distinctive facial features that may be described as "coarse." Other common features include unusually fair skin with light-colored hair and an abnormal side-to-side curvature of the spine (scoliosis). The life expectancy of people with this condition appears to be nearly normal.

* Rhabdoid Tumor. These highly aggressive tumors are called rhabdoid because their cells resemble rhabdomyoblasts, which are cells that are normally found in embryos before birth and develop into muscles used for movement (skeletal muscles). Rhabdoid tumors are rare in the general population. They usually occur in the first year of life, and are much less likely to appear after age 4. In people with RTs, the tumors occur at an average age of 4 to 7 months, and can even occur before birth. Affected individuals may have multifocal synchronous tumors, which means that multiple tumors that develop independently (primary tumors) occur at the same time. Rhabdoid tumors usually grow and spread more quickly than those in children without this predisposition, and affected individuals often do not survive past childhood. More than half of all malignant rhabdoid

tumors (MRTs) develop in the cerebellum, which is the part of the brain that coordinates movement. Rhabdoid tumors in the brain and spinal cord (central nervous system) are called atypical teratoid/rhabdoid tumors (AT/RTs). Rhabdoid tumors also occur outside the central nervous system. These tumors include rhabdoid tumors of the kidneys (RTKs) and tumors that develop in other organs and tissues of the body.

* Rhabdomyosarcoma (alternate to Cancer-Rhabdomyosarcoma?)

* Rift Valley Fever (RVF) is a viral disease most commonly seen in domesticated animals in sub-Saharan Africa, such as cattle, buffalo, sheep, goats, and camels. People can get RVF through contact with blood, body fluids, or tissues of infected animals, or through bites from infected mosquitoes. Spread from person to person has not been documented. Although RVF often causes severe illness in animals, most people with RVF have either no symptoms or a mild illness with fever, weakness, back pain, and dizziness. However, a small percentage (8-10%) of people with RVF develop much more severe symptoms, including eye disease, hemorrhagic fever and encephalitis (swelling of the brain).

* Robinow syndrome (also known as Robinow-Silverman-Smith syndrome, Robinow dwarfism, fetal face, fetal face syndrome, fetal facies syndrome, acral dysostosis with facial and genital abnormalities, or mesomelic dwarfism-small genitalia syndrome) is an extremely rare genetic disorder characterized by short-limbed dwarfism, abnormalities in the head, face, and external genitalia, as well as vertebral segmentation. Two forms of the disorder exist, dominant and recessive, of which the former is more common. Patients with the dominant version often suffer moderately from the aforementioned symptoms. Recessive cases, on the other hand, are usually more physically marked, and individuals may exhibit more skeletal abnormalities. Autosomal recessive Robinow syndrome is characterized by skeletal abnormalities including shortening of the long bones in the arms and legs, particularly the forearms; abnormally short fingers and toes; wedge-shaped spinal bones leading to an abnormal curvature of the spine (kyphoscoliosis); fused or missing ribs; and short stature. Affected individuals also have distinctive facial features, such as a broad forehead, prominent and widely spaced eyes, a short nose with an upturned tip, a wide nasal bridge, and a broad and triangle-shaped mouth. Development is delayed in 10 to 15 percent of people with this condition, although intelligence is usually normal. The variant form of autosomal dominant Robinow syndrome includes increased bone mineral density (osteosclerosis) affecting the bones of the skull in addition to the signs and symptoms listed above.

* Scarlet fever is a disease resulting from a group A streptococcus (group A strep) infection, also known as Streptococcus pyogenes. The signs and symptoms include a sore throat, fever, headaches, swollen lymph nodes, and a characteristic rash. The rash is red and feels like sandpaper and the tongue may be red and bumpy. It most commonly affects children between five and 15 years of age. Scarlet fever affects a small number of people who have strep throat or streptococcal skin infections. The bacteria are usually spread by people coughing or sneezing. It can also be spread when a person touches an object that has the bacteria on it and then touches their mouth or

nose. The characteristic rash is due to the erythrogenic toxin, a substance produced by some types of the bacterium.

* Scheuermann's disease is a self-limiting skeletal disorder of childhood. Scheuermann's disease describes a condition where the vertebrae grow unevenly with respect to the sagittal plane; that is, the posterior angle is often greater than the anterior. This uneven growth results in the signature "wedging" shape of the vertebrae, causing kyphosis. Kyphosis is a curving of the spine that causes a bowing or rounding of the back. This leads to a hunchback or slouching posture. Kyphosis can occur at any age, although it is rare at birth. Scheuermann's disease is considered to be a form of juvenile osteochondrosis of the spine. It is found mostly in teenagers and presents a significantly worse deformity than postural kyphosis. Patients suffering with Scheuermann’s kyphosis cannot consciously correct their posture. The apex of their curve, located in the thoracic vertebrae, is quite rigid. Scheuermann's disease is notorious for causing lower and mid-level back and neck pain, which can be severe and disabling. It has been reported that curves in the lower thoracic region cause more pain, whereas curves in the upper region present a more visual deformity. The cause is not currently known, and the condition appears to be multifactorial.

* Schnitzler syndrome is a rare autoinflammatory condition. Signs and symptoms of the condition vary but may include urticaria; recurrent fevers; joint pain and inflammation; organomegaly (abnormally enlarged organs); and/or blood abnormalities. The exact underlying cause of the condition is unknown; however, most cases occur sporadically in people with no family history of the condition. The signs and symptoms of Schnitzler syndrome vary but may include: Red raised patches of skin (urticaria) that may become itchy, recurrent fevers, join pain and inflammation, organomegaly (enlarged internal organs) often involving the lymph nodes, liver and/or spleen, bone pain, blood abnormalities, muscle aches, fatigue, weight loss. Schnitzler syndrome is a late-onset autoinflammatory disorder, the typical onset is at around 55 years old. As of 2017 the cause of the disease was not understood.

* Sprengel Deformity (also known as high scapula or congenital high scapula) is a rare congenital skeletal abnormality where a person has one shoulder blade that sits higher on the back than the other. The deformity is due to a failure in early fetal development where the shoulder fails to descend properly from the neck to its final position. The deformity is commonly associated with other conditions, most notably Klippel–Feil syndrome, congenital scoliosis, including cervical scoliosis, fused ribs, the presence of an omovertebral bone (an extra bone between the scapula and a cervical vertebra) and spina bifida. The left shoulder is the most commonly affected shoulder, but the condition can be bilateral, meaning that both shoulders are affected. About 75% of all observed cases are girls. The scapula is small and rotated so that its inferior edge points toward the spine. Sometimes a bony connection is present between the elevated scapula and one of the cervical vertebrae, usually C5 or C6. This connection is known as an omovertebral bone. There is a high correlation between Sprengel's deformity and Klippel–Feil syndrome.

* Stickler syndrome is a group of hereditary conditions characterized by a distinctive facial appearance, eye abnormalities, hearing loss, and joint problems. These signs and symptoms vary widely among affected individuals. A characteristic feature of Stickler syndrome is a somewhat flattened facial appearance. This appearance results from underdeveloped bones in the middle of the face, including the cheekbones and the bridge of the nose. Many people with Stickler syndrome have severe nearsightedness (high myopia). In people with Stickler syndrome, hearing loss varies in degree and may become more severe over time. Most people with Stickler syndrome have skeletal abnormalities that affect the joints. The joints of affected children and young adults may be loose and very flexible (hypermobile), though joints become less flexible with age. Type I has the highest risk of retinal detachment. Type II also includes eye abnormalities, but type III does not (and is often called non-ocular Stickler syndrome). Types II and III are more likely than type I to have significant hearing loss. Types IV, V, and VI are very rare and have each been diagnosed in only a few individuals.

1.1.31 RTS-23

https://archive.org/details/Resonant_Therapy_Sessions_23

Ankyloglossia; Birt-Hogg-Dube Syndrome; Cancer-Thoracic; Cancer-Urethral; Cancer-Wilms Tumor; Cherubism; Contractural Arachnodactyly; Diphyllobothriasis; Encephalocele; Ergotism; Fibromatosis Juvenile Hyaline; Glucocerebrosidase Deficiency; Klippel-Trenaunay Disease; Lymphangioleiomyomatosis; Nelson Syndrome; Neurocysticercosis; Ophthalmoplegia Ataxia and Areflexia Syndrome; Pin Worms; Piroplasmosis; Rope Worm; Royer Syndrome; Smith-Lemli-Opitz Syndrome; Smith-Magenis Syndrome; Spherocytosis Hereditary; Spongiform Encephalopathy Subacute; Tapeworm Infection; Telangiectasia Hereditary Hemorrhagic; Usher Syndrome; White Dot Syndrome; Wolf-Hirschhorn Syndrome

* Ankyloglossia, also known as tongue-tie, is a congenital oral anomaly that may decrease the mobility of the tongue tip and is caused by an unusually short, thick lingual frenulum, a membrane connecting the underside of the tongue to the floor of the mouth. Ankyloglossia varies in degree of severity from mild cases characterized by mucous membrane bands to complete ankyloglossia whereby the tongue is tethered to the floor of the mouth. Ankyloglossia can affect eating, speech, and oral hygiene as well as have mechanical/social effects. Ankyloglossia can also prevent the tongue from contacting the anterior palate. This can then promote an infantile swallow and hamper the progression to an adult-like swallow which can result in an open bite deformity. It can also result in mandibular prognathism; this happens when the tongue contacts the anterior portion of the mandible with exaggerated anterior thrusts.

* Birt-Hogg-Dubé syndrome is a rare disorder that affects the skin and lungs and

increases the risk of certain types of tumors. Its signs and symptoms vary among affected individuals. Birt-Hogg-Dubé syndrome is characterized by multiple noncancerous (benign) skin tumors, particularly on the face, neck, and upper chest. These growths typically first appear in a person's twenties or thirties and become larger and more numerous over time. Affected individuals also have an increased chance of developing cysts in the lungs and an abnormal accumulation of air in the chest cavity (pneumothorax) that may result in the collapse of a lung. Additionally, Birt-Hogg-Dubé syndrome is associated with an elevated risk of developing cancerous or noncancerous kidney tumors. Other types of cancer have also been reported in affected individuals, but it is unclear whether these tumors are actually a feature of Birt-Hogg-Dubé syndrome.

* Cancer-Thoracic. Thoracic cancer refers to any cancer located in the organs, glands, or structures of your thoracic cavity, or chest. This includes well-known cancers such as lung cancer (currently the second-most common cancer among both men and women) and esophageal cancer, as well as less common cancers such as thymus cancer and pleural cancer. Thoracic cancer symptoms vary based on the specific cancer type and the tissue it affects. In the early stages, there are often no symptoms, and as a result, thoracic cancer is harder to diagnose until it is at an advanced stage. When symptoms do occur, they may include: A new cough that does not go away or gets worse with time, changes in a chronic cough or “smoker’s cough”, chest pain that worsens with laughing, deep breathing, or coughing, coughing up blood or bloody or rust-colored mucus, fatigue, heartburn, indigestion, or vomiting, hoarseness, shortness of breath or wheezing, unintentional weight loss or unexplained loss of appetite, weakness.

* Cancer-Urethral. Urethral cancer is a rare cancer originating from the urethra. Symptoms include blood in the urine, lump at end of penis, or bloody penile discharge. The most common type is papillary urothelial carcinoma. Risk factors suggested include prolonged irritations of the urethra due to urinary catheterization, chronic inflammation due to infection, radiation, diverticula of the urethra, and urethral strictures. Symptoms that may be caused by urethral cancer include: Blood visible in urine. Bloody urethral discharge. Weak or interrupted flow of urine. Urination occurs often, painful urination, inability to pass urine. A lump or thickness in the perineum or penis. Enlarged lymph nodes or pain in the groin or vaginal area.

* Cancer-Wilms Tumor also known as nephroblastoma, is a cancer of the kidneys that typically occurs in children, rarely in adults. It causes a tumor on one or both kidneys. Having certain genetic conditions or birth defects can increase the risk of getting it. Symptoms include a lump in the abdomen, blood in the urine, loss of appetite, abdominal pain, nausea and vomiting,high blood pressure in some cases and a fever for no reason.

* Cherubism is a disorder characterized by abnormal bone tissue in the jaw. Beginning in early childhood, both the lower jaw (the mandible) and the upper jaw (the maxilla) become enlarged as bone is replaced with painless, cyst-like growths. These growths give the cheeks a swollen, rounded appearance and often interfere with normal tooth

development. In some people the condition is so mild that it may not be noticeable, while other cases are severe enough to cause problems with vision, breathing, speech, and swallowing. Enlargement of the jaw usually continues throughout childhood and stabilizes during puberty. The abnormal growths are gradually replaced with normal bone in early adulthood. As a result, many affected adults have a normal facial appearance. Most people with cherubism have few, if any, signs and symptoms affecting other parts of the body. Rarely, however, this condition occurs as part of another genetic disorder. For example, abnormal jaw growth, like that in cherubism, can occur in Ramon syndrome, which also involves short stature, intellectual disability, and overgrowth of the gums (gingival fibrosis). Additionally, cherubism-like growths have been reported in rare cases of Noonan syndrome (a developmental disorder characterized by unusual facial characteristics, short stature, and heart defects), fragile X syndrome (a condition primarily affecting males that causes learning disabilities and cognitive impairment), and neurofibromatosis type 1 (a condition primarily characterized by multiple skin tumors).

* Contractural arachnodactyly also known as Beals-Hecht syndrome or congenital contractural arachnodactyly, is a rare autosomal dominant congenital connective tissue disorder. People with CA typically have an arm span that is greater than their height and very long fingers and toes. Beals syndrome and Marfan syndrome are similar in many ways, but there are also some important differences, specifically how the joints are affected. Contractural arachnodactyly is a disorder that affects many parts of the body. People with this condition typically are tall with long limbs (dolichostenomelia) and long, slender fingers and toes (arachnodactyly). They often have permanently bent joints (contractures) that can restrict movement in their hips, knees, ankles, or elbows. Additional features of contractural arachnodactyly include underdeveloped muscles, a rounded upper back that also curves to the side (kyphoscoliosis), permanently bent fingers and toes (camptodactyly), ears that look "crumpled," and a protruding chest (pectus carinatum). Rarely, people with contractural arachnodactyly have heart defects such as an enlargement of the blood vessel that distributes blood from the heart to the rest of the body (aortic root dilatation) or a leak in one of the valves that control blood flow through the heart (mitral valve prolapse). The life expectancy of individuals with contractural arachnodactyly varies depending on the severity of symptoms but is typically not shortened. A rare, severe form of congenital contractural arachnodactyly involves both heart and digestive system abnormalities in addition to the skeletal features described above; individuals with this severe form of the condition usually do not live past infancy.

* Diphyllobothriasis is the infection caused by tapeworms of the genus Diphyllobothrium. Diphyllobothriasis mostly occurs in regions where raw fish is regularly consumed; those who consume raw fish are at risk of infection. The infection is often asymptomatic and usually presents only with mild symptoms, which may include gastrointestinal complaints, weight loss, and fatigue. Rarely, vitamin B12 deficiency (possibly leading to anaemia) and gastrointestinal obstructions may occur. Infection may be long-lasting in absence of treatment. Diphyllobothriasis is generally diagnosed by looking for eggs or tapeworm segments in passed stool. Most infections (~80%) are asymptomatic.

Infections may be long-lasting, persisting for many years or decades (up to 25 years) if untreated. Symptoms (when present) are generally mild. Manifestations may include: abdominal pain and discomfort, diarrhoea, vomiting, constipation, weight loss, and fatigue. Additional symptoms have been reported/described, including: dyspepsia, abdominal distension (commonly as presenting complaint), headache, myalgia, and dizziness.

* Encephalocele is a neural tube defect characterized by sac-like protrusions of the brain and the membranes that cover it through openings in the skull. These defects are caused by failure of the neural tube to close completely during fetal development. Encephaloceles cause a groove down the middle of the skull, or between the forehead and nose, or on the back side of the skull. The severity of encephalocele varies, depending on its location. Encephaloceles are often accompanied by craniofacial abnormalities or other brain malformations. Symptoms may include neurologic problems, hydrocephalus (cerebrospinal fluid accumulated in the brain), spastic quadriplegia (paralysis of the limbs), microcephaly (an abnormally small head), ataxia (uncoordinated muscle movement), developmental delay, vision problems, mental and growth retardation, and seizures.

* Ergotism is the effect of long-term ergot poisoning, traditionally due to the ingestion of the alkaloids produced by the Claviceps purpurea fungus that infects rye and other cereals, and more recently by the action of a number of ergoline-based drugs. It is also known as ergotoxicosis, ergot poisoning, and Saint Anthony's Fire. Convulsive symptoms include painful seizures and spasms, diarrhea, paresthesias, itching, mental effects including mania or psychosis, headaches, nausea and vomiting. Usually the gastrointestinal effects precede central nervous system effects. The dry gangrene is a result of vasoconstriction induced by the ergotamine-ergocristine alkaloids of the fungus. It affects the more poorly vascularized distal structures, such as the fingers and toes. Symptoms include desquamation or peeling, weak peripheral pulses, loss of peripheral sensation, edema and ultimately the death and loss of affected tissues. Vasoconstriction is treated with vasodilators.

* Fibromatosis Juvenile Hyaline is a very rare, autosomal recessive disease due to mutations in capillary morphogenesis protein-2 (CMG-2 gene). It occurs from early childhood to adulthood, and presents as slow-growing, pearly white or skin-colored dermal or subcutaneous papules or nodules on the face, scalp, and back, which may be confused clinically with neurofibromatosis. The World Health Organization, 2020, reclassified the papules and nodules that occur in juvenile hyaline firbromatosis as one of the specific benign types of tumors in the category of fibroblastic and myofibroblastic tumors. This condition is characterised by abnormal growth of hyalinized fibrous tissue with cutaneous, mucosal, osteoarticular and systemic involvement. Clinical features include extreme pain at minimal handling in a newborn, gingival hypertrophy, subcutaneous nodules, painful joint stiffness and contractures, muscle weakness and hypotonia.

* Glucocerebrosidase Deficiency or Gaucher disease is an inherited disorder that

affects many of the body's organs and tissues. The signs and symptoms of this condition vary widely among affected individuals. Researchers have described several types of Gaucher disease based on their characteristic features. Type 1 Gaucher disease is the most common form of this condition. Type 1 is also called non-neuronopathic Gaucher disease because the brain and spinal cord (the central nervous system) are usually not affected. The features of this condition range from mild to severe and may appear anytime from childhood to adulthood. Major signs and symptoms include enlargement of the liver and spleen (hepatosplenomegaly), a low number of red blood cells (anemia), easy bruising caused by a decrease in blood platelets (thrombocytopenia), lung disease, and bone abnormalities such as bone pain, fractures, and arthritis. Types 2 and 3 Gaucher disease are known as neuronopathic forms of the disorder because they are characterized by problems that affect the central nervous system. In addition to the signs and symptoms described above, these conditions can cause abnormal eye movements, seizures, and brain damage. Type 2 Gaucher disease usually causes life-threatening medical problems beginning in infancy. Type 3 Gaucher disease also affects the nervous system, but it tends to worsen more slowly than type 2. The most severe type of Gaucher disease is called the perinatal lethal form. This condition causes severe or life-threatening complications starting before birth or in infancy. Features of the perinatal lethal form can include extensive swelling caused by fluid accumulation before birth (hydrops fetalis); dry, scaly skin (ichthyosis) or other skin abnormalities; hepatosplenomegaly; distinctive facial features; and serious neurological problems. As its name indicates, most infants with the perinatal lethal form of Gaucher disease survive for only a few days after birth. Another form of Gaucher disease is known as the cardiovascular type because it primarily affects the heart, causing the heart valves to harden (calcify). People with the cardiovascular form of Gaucher disease may also have eye abnormalities, bone disease, and mild enlargement of the spleen (splenomegaly).

* Klippel-Trenaunay Disease or Klippel-Trenaunay syndrome is a condition that affects the development of blood vessels, soft tissues (such as skin and muscles), and bones. The disorder has three characteristic features: a red birthmark called a port-wine stain, abnormal overgrowth of soft tissues and bones, and vein malformations. Most people with Klippel-Trenaunay syndrome are born with a port-wine stain. This type of birthmark is caused by swelling of small blood vessels near the surface of the skin. Port-wine stains are typically flat and can vary from pale pink to deep maroon in color. In people with Klippel-Trenaunay syndrome, the port-wine stain usually covers part of one limb. The affected area may become lighter or darker with age. Occasionally, port-wine stains develop small red blisters that break open and bleed easily. Klippel-Trenaunay syndrome is also associated with overgrowth of bones and soft tissues beginning in infancy. Usually this abnormal growth is limited to one limb, most often one leg. However, overgrowth can also affect the arms or, rarely, the torso. The abnormal growth can cause pain, a feeling of heaviness, and reduced movement in the affected area. If the overgrowth causes one leg to be longer than the other, it can also lead to problems with walking. Malformations of veins are the third major feature of Klippel-Trenaunay syndrome. These abnormalities include varicose veins, which are swollen and twisted veins near the surface of the skin that often cause pain. Varicose veins usually occur on

the sides of the upper legs and calves. Veins deep in the limbs can also be abnormal in people with Klippel-Trenaunay syndrome. Malformations of deep veins increase the risk of a type of blood clot called a deep vein thrombosis (DVT). If a DVT travels through the bloodstream and lodges in the lungs, it can cause a life-threatening blood clot known as a pulmonary embolism (PE). Other complications of Klippel-Trenaunay syndrome can include a type of skin infection called cellulitis, swelling caused by a buildup of fluid (lymphedema), and internal bleeding from abnormal blood vessels. Less commonly, this condition is also associated with fusion of certain fingers or toes (syndactyly) or the presence of extra digits (polydactyly).

* Lymphangioleiomyomatosis (LAM) is a condition that affects the lungs, the kidneys, and the lymphatic system. LAM is found almost exclusively in women. It often occurs as a feature of an inherited syndrome called tuberous sclerosis complex. When LAM occurs alone it is called isolated or sporadic LAM. Signs and symptoms of LAM most often appear during a woman's thirties. Affected women have an overgrowth of abnormal smooth muscle-like cells (LAM cells) in the lungs, resulting in the formation of lung cysts and the destruction of normal lung tissue. They may also have an accumulation of fluid in the cavity around the lungs (chylothorax). The lung abnormalities resulting from LAM may cause difficulty breathing (dyspnea), chest pain, and coughing, which may bring up blood (hemoptysis). Many women with this disorder have recurrent episodes of collapsed lung (spontaneous pneumothorax). The lung problems may be progressive and, without lung transplantation, may eventually lead to limitations in activities of daily living, the need for oxygen therapy, and respiratory failure. Although LAM cells are not considered cancerous, they may spread between tissues (metastasize). As a result, the condition may recur even after lung transplantation. Women with LAM may develop cysts in the lymphatic vessels of the chest and abdomen. These cysts are called lymphangioleiomyomas. Affected women may also develop tumors called angiomyolipomas made up of LAM cells, fat cells, and blood vessels. Angiomyolipomas usually develop in the kidneys. Internal bleeding is a common complication of angiomyolipomas.

* Nelson's syndrome is a rare disorder that sometimes occurs in patients in about 15-25% of patients who have had both adrenal glands removed to treat Cushing's disease. In patients with pre-existing adrenocorticotropic hormone (ACTH)-secreting pituitary adenomas, loss of adrenal feedback following bilateral adrenalectomy can trigger the rapid growth of the tumor, leading to visual symptoms (e.g. bitemporal hemianopsia) and hyperpigmentation. The severity of the disease is dependent upon the effect of ACTH release on the skin, pituitary hormone loss from mass compression, as well as invasion into surrounding structures around the pituitary gland.

* Neurocysticercosis is a specific form of the infectious parasitic disease cysticercosis that is caused by the infection with Taenia solium, a tapeworm found in pigs. Neurocysticercosis occurs when cysts formed by the infection take hold within the brain, causing neurologic syndromes such as epileptic seizures. It is a common cause of seizures worldwide. It has been called a "hidden epidemic" and "arguably the most common parasitic disease of the human nervous system". Common symptoms of

neurocysticercosis include seizures, headaches, blindness, meningitis and dementia. Neurocysticercosis most commonly involves the cerebral cortex followed by the cerebellum. The pituitary gland is very rarely involved in neurocysticercosis. The cysts may rarely coalesce and form a tree-like pattern which is known as racemose neurocysticercosis, which when involving the pituitary gland may result in multiple pituitary hormone deficiency.

* Ophthalmoplegia Ataxia and Areflexia Syndrome or Miller Fisher syndrome is a rare, acquired nerve disease that is considered to be a variant of Guillain-Barré syndrome. It is characterized by abnormal muscle coordination, paralysis of the eye muscles, and absence of the tendon reflexes. Like Guillain-Barré syndrome, symptoms may be preceded by a viral illness. Additional symptoms include generalized muscle weakness and respiratory failure. The majority of individuals with Miller Fisher syndrome have a unique antibody that characterizes the disorder.

* Pin Worms. Pinworm infection (threadworm infection in the UK), also known as enterobiasis, is a human parasitic disease caused by the pinworm. The most common symptom is itching in the anal area. This can make sleeping difficult. The period of time from swallowing eggs to the appearance of new eggs around the anus is 4 to 8 weeks. Some people who are infected do not have symptoms. The disease is spread between people by pinworm eggs. The eggs initially occur around the anus and can survive for up to three weeks in the environment. They may be swallowed following contamination of the hands, food, or other articles. Pinworm infections commonly occur in all parts of the world. They are the most common type of worm infection in the developed world. School-aged children are the most commonly infected. One-third of individuals with pinworm infection are totally asymptomatic. The main symptoms are itching in and around the anus and perineum. The itching occurs mainly during the night, and is caused by the female pinworms migrating to lay eggs around the anus.

* Piroplasmosis can refer to: Babesiosis in humans. Equine piroplasmosis in horses. Bovine piroplasmosis in cattle. Babesiosis or piroplasmosis is a malaria-like parasitic disease caused by infection with a eukaryotic parasite in the order Piroplasmida. People can get infected with Babesia parasites by the bite of an infected tick, by getting a blood transfusion from an infected donor of blood products, or by congenital transmission (an infected mother to her baby). After trypanosomes, Babesia is thought to be the second-most common blood parasite of mammals. They can have major adverse effects on the health of domestic animals in areas without severe winters. In cattle the disease is known as Texas cattle fever or redwater. Half of all children and a quarter of previously healthy adults with Babesia infection are asymptomatic. When people do develop symptoms, the most common are fever and hemolytic anemia, symptoms that are similar to those of malaria. People with symptoms usually become ill 1 to 4 weeks after the bite, or 1 to 9 weeks after transfusion of contaminated blood products. A person infected with babesiosis gradually develops malaise and fatigue, followed by a fever. Hemolytic anemia, in which red blood cells are destroyed and removed from the blood, also develops. Chills, sweats, and thrombocytopenia are also common symptoms. Symptoms may last from several days to several months.

* Rope Worm is a pseudoscientific term for long thin pieces of damaged intestinal epithelium or other bowel content that have been misidentified as human parasitic worms. In fact, they are not actual parasites, but instead fragments of mucous membrane shed from the gut following the use of bleach enemas and other similarly ineffective and toxic cleanses. The phenomenon results from improper identification of intestinal artifacts expelled from the body.

* Royer Syndrome is a chromosomal disorder associated with a deletion of the proximal portion of the long arm of chromosome 15 (15q11-q13) in the majority of affected individuals. The abnormalities occur exclusively on the paternally derived chromosome 15. Clinical manifestations include mental retardation, muscular hypotonia, obesity, hyperphagia, short stature, hypogonadism, strabismus, and hypersomnolence.

* Smith–Lemli–Opitz syndrome is an inborn error of cholesterol synthesis. It is an autosomal recessive, multiple malformation syndrome caused by a mutation in the enzyme 7-Dehydrocholesterol reductase encoded by the DHCR7 gene. It causes a broad spectrum of effects, ranging from mild intellectual disability and behavioural problems to lethal malformations. Smith-Lemli-Opitz syndrome is a developmental disorder that affects many parts of the body. This condition is characterized by distinctive facial features, small head size (microcephaly), intellectual disability or learning problems, and behavioral problems. Many affected children have the characteristic features of autism, a developmental condition that affects communication and social interaction. Malformations of the heart, lungs, kidneys, gastrointestinal tract, and genitalia are also common. Infants with Smith-Lemli-Opitz syndrome have weak muscle tone (hypotonia), experience feeding difficulties, and tend to grow more slowly than other infants. Most affected individuals have fused second and third toes (syndactyly), and some have extra fingers or toes (polydactyly). The signs and symptoms of Smith-Lemli-Opitz syndrome vary widely. Mildly affected individuals may have only minor physical abnormalities with learning and behavioral problems. Severe cases can be life-threatening and involve profound intellectual disability and major physical abnormalities.

* Smith-Magenis syndrome is a developmental disorder that affects many parts of the body. The major features of this condition include mild to moderate intellectual disability, delayed speech and language skills, distinctive facial features, sleep disturbances, and behavioral problems. Most people with Smith-Magenis syndrome have a broad, square-shaped face with deep-set eyes, full cheeks, and a prominent lower jaw. The middle of the face and the bridge of the nose often appear flattened. The mouth tends to turn downward with a full, outward-curving upper lip. These facial differences can be subtle in early childhood, but they usually become more distinctive in later childhood and adulthood. Dental abnormalities are also common in affected individuals. Disrupted sleep patterns are characteristic of Smith-Magenis syndrome, typically beginning early in life. Affected people may be very sleepy during the day, but they have trouble falling asleep at night and awaken several times during the night and early morning. People with Smith-Magenis syndrome typically have affectionate, engaging personalities, but

most also have behavioral problems. These include frequent temper tantrums and outbursts, aggression, anxiety, impulsiveness, and difficulty paying attention. Self-injury, including biting, hitting, head banging, and skin picking, is very common. Repetitive self-hugging is a behavioral trait that may be unique to Smith-Magenis syndrome. Some people with this condition also compulsively lick their fingers and flip pages of books and magazines (a behavior known as "lick and flip"). Other signs and symptoms of Smith-Magenis syndrome include short stature, abnormal curvature of the spine (scoliosis), reduced sensitivity to pain and temperature, and a hoarse voice. Some people with this disorder have ear abnormalities that lead to hearing loss. Affected individuals may have eye abnormalities that cause nearsightedness (myopia) and other vision problems. Although less common, heart and kidney defects also have been reported in people with Smith-Magenis syndrome.

* Spherocytosis Hereditary is a condition that affects red blood cells. People with this condition typically experience a shortage of red blood cells (anemia), yellowing of the eyes and skin (jaundice), and an enlarged spleen (splenomegaly). Most newborns with hereditary spherocytosis have severe anemia, although it improves after the first year of life. Splenomegaly can occur anytime from early childhood to adulthood. About half of affected individuals develop hard deposits in the gallbladder called gallstones, which typically occur from late childhood to mid-adulthood. There are four forms of hereditary spherocytosis, which are distinguished by the severity of signs and symptoms. They are known as the mild form, the moderate form, the moderate/severe form, and the severe form. It is estimated that 20 to 30 percent of people with hereditary spherocytosis have the mild form, 60 to 70 percent have the moderate form, 10 percent have the moderate/severe form, and 3 to 5 percent have the severe form. People with the mild form may have very mild anemia or sometimes have no symptoms. People with the moderate form typically have anemia, jaundice, and splenomegaly. Many also develop gallstones. The signs and symptoms of moderate hereditary spherocytosis usually appear in childhood. Individuals with the moderate/severe form have all the features of the moderate form but also have severe anemia. Those with the severe form have life-threatening anemia that requires frequent blood transfusions to replenish their red blood cell supply. They also have severe splenomegaly, jaundice, and a high risk for developing gallstones. Some individuals with the

* Spongiform Encephalopathy Subacute also neurocognitive disorder due to prion disease or Creutzfeldt-Jakob disease (CJD) is a rare, degenerative brain disorder. Early symptoms include memory problems, behavioral changes, poor coordination, and visual disturbances. Later symptoms include dementia, involuntary movements, blindness, weakness, and coma. About 70% of people die within a year of diagnosis. Symptoms usually start around age 60. Memory problems, behavior changes, vision problems, and poor muscle coordination progress quickly to dementia, coma, and death. Most patients die within a year. The three main categories of CJD are : Sporadic CJD, which occurs for no known reason. Hereditary CJD, which runs in families. Acquired CJD, which occurs from contact with infected tissue, usually during a medical procedure. Cattle can get a disease related to CJD called bovine spongiform encephalopathy (BSE) or "mad cow disease." There is concern that people can get a variant of CJD from eating beef

from an infected animal, but there is no direct proof to support this.

* Tapeworm Infection is caused by ingesting food or water contaminated with tapeworm eggs or larvae. If you ingest certain tapeworm eggs, they can migrate outside your intestines and form larval cysts in body tissues and organs (invasive infection). If you ingest tapeworm larvae, however, they develop into adult tapeworms in your intestines (intestinal infection). An adult tapeworm consists of a head, neck and chain of segments called proglottids. When you have an intestinal tapeworm infection, the tapeworm head adheres to the intestinal wall, and the proglottids grow and produce eggs. Adult tapeworms can live for up to 30 years in a host. Intestinal tapeworm infections are usually mild, with only one or two adult tapeworms. But invasive larval infections can cause serious complications. Signs and symptoms of intestinal infection include: Nausea, weakness, loss of appetite, abdominal pain, diarrhea, dizziness, salt craving, weight loss and inadequate absorption of nutrients from food. If tapeworm larvae have migrated out of your intestines and formed cysts in other tissues, they can eventually cause organ and tissue damage, resulting in: headaches, cystic masses or lumps, allergic reactions to the larvae, neurological signs and symptoms, including seizures.

* Telangiectasia Hereditary Hemorrhagic is a rare autosomal dominant genetic disorder that leads to abnormal blood vessel formation in the skin, mucous membranes, and often in organs such as the lungs, liver, and brain. It may lead to nosebleeds, acute and chronic digestive tract bleeding, and various problems due to the involvement of other organs. Treatment focuses on reducing bleeding from blood vessel lesions, and the removal of arteriovenous malformations in organs. Chronic bleeding often requires iron supplements and sometimes blood transfusions. THH is transmitted in an autosomal dominant fashion, and occurs in one in 5,000–8,000 people in North America. Telangiectasia (small vascular malformations) may occur in the skin and mucosal linings of the nose and gastrointestinal tract. The most common problem is nosebleeds (epistaxis), which happen frequently from childhood and affect about 90–95% of people with THH. Lesions on the skin and in the mouth bleed less often but may be considered cosmetically displeasing; they affect about 80%. The skin lesions characteristically occur on the lips, the nose and the fingers, and on the skin of the face in sun-exposed areas. They appear suddenly, with the number increasing over time. About 20% are affected by symptomatic digestive tract lesions, although a higher percentage have lesions that do not cause symptoms. These lesions may bleed intermittently, which is rarely significant enough to be noticed (in the form of bloody vomiting or black stool), but can eventually lead to depletion of iron in the body, resulting in iron-deficiency anemia. Arteriovenous malformations (AVMs, larger vascular malformations) occur in larger organs, predominantly the lungs (pulmonary AVMs) (50%), liver (30–70%) and the brain (cerebral AVMs, 10%), with a very small proportion (<1%) of AVMs in the spinal cord.

* Usher syndrome is an inherited disease that causes serious hearing loss and retinitis pigmentosa, an eye disorder that causes your vision to get worse over time. It is the most common condition that affects both hearing and vision. There are three types of Usher syndrome: People with type I are deaf from birth and have severe balance problems from a young age. Vision problems usually start by age 10 and lead to

blindness. People with type II have moderate to severe hearing loss and normal balance. Vision problems start in the early teens and get worse more slowly than in type I. People with type III are born with normal hearing and near-normal balance but develop vision problems and then hearing loss.

* White Dot Syndrome. White dot syndromes are inflammatory diseases characterized by the presence of white dots on the fundus, the interior surface of the eye. The majority of individuals affected with white dot syndromes are younger than fifty years of age. Some symptoms include blurred vision and visual field loss. There are many theories for the etiology of white dot syndromes including infectious, viral, genetics and autoimmune.

* Wolf-Hirschhorn syndrome (WHS) is an extremely rare chromosomal disorder caused by a missing piece (partial deletion or monosomy) of the short arm of chromosome 4. Wolf-Hirschhorn syndrome is a condition that affects many parts of the body. The major features of this disorder include a characteristic facial appearance, delayed growth and development, intellectual disability, and seizures. Almost everyone with this disorder has distinctive facial features, including a broad, flat nasal bridge and a high forehead. This combination is described as a "Greek warrior helmet" appearance. The eyes are widely spaced and may be protruding. Additionally, affected individuals may have asymmetrical facial features and an unusually small head (microcephaly). Slow growth begins before birth, and affected infants tend to have problems feeding and gaining weight (failure to thrive). They also have weak muscle tone (hypotonia) and underdeveloped muscles. Motor skills such as sitting, standing, and walking are significantly delayed. Most children and adults with this disorder also have short stature. Compared to people with other forms of intellectual disability, their socialization skills are strong, while verbal communication and language skills tend to be weaker. Most affected children also have seizures, which may be resistant to treatment. Seizures tend to disappear with age. Wolf-Hirschhorn syndrome can also cause abnormalities of the eyes, heart, genitourinary tract, and brain. A condition called Pitt-Rogers-Danks syndrome has features that overlap with those of Wolf-Hirschhorn syndrome. Researchers now recognize that these two conditions are actually part of a single syndrome with variable signs and symptoms.

1.1.32 RTS-24

https://archive.org/details/Resonant_Therapy_Sessions_24

Acrocephalosyndactylia; Blue Rubber Bleb Nevus Syndrome; Cat Eye Syndrome; Chediak-Higashi Syndrome; Epithelioma Basal Cell; Erythema Infectiosum; Freiberg Disease; Glossitis Areata Exfoliativa; Hookworm Infections; Jacobsen Syndrome; Leiomyosarcoma; Noonan Syndrome; Oculosympathetic Syndrome; Plagiocephaly Nonsynostotic; Poikiloderma of Civatte; Reticulohistiocytoma; Reye Syndrome; Russell Silver Syndrome; Schwannoma; Septo-Optic Dysplasia; Shigella Infections General;

Situs Inversus; Supraglottitis; Taenia Infections; Tetrahydrobiopterin Deficiency; Trichomonas Infections; Trichorhinophalangeal Syndrome Type II; Typhus Sao Paulo; Wolfram Syndrome; Wolman Disease

* Acrocephalosyndactylia; Blue Rubber Bleb Nevus Syndrome; Cat Eye Syndrome; Chediak-Higashi Syndrome; Epithelioma Basal Cell; Erythema Infectiosum; Freiberg Disease; Glossitis Areata Exfoliativa; Hookworm Infections; Jacobsen Syndrome; Leiomyosarcoma; Noonan Syndrome; Oculosympathetic Syndrome; Plagiocephaly Nonsynostotic; Poikiloderma of Civatte; Reticulohistiocytoma; Reye Syndrome; Russell Silver Syndrome; Schwannoma; Septo-Optic Dysplasia; Shigella Infections General; Situs Inversus; Supraglottitis; Taenia Infections; Tetrahydrobiopterin Deficiency; Trichomonas Infections; Trichorhinophalangeal Syndrome Type II; Typhus Sao Paulo; Wolfram Syndrome; Wolman Disease;

* Acrocephalosyndactylia is the common presentation of craniosynostosis and syndactyly. Relevant types here are: Type 1 – Apert syndrome a genetic disorder characterized by skeletal abnormalities. A key feature of Apert syndrome is the premature closure of the bones of the skull (craniosynostosis). This early fusion prevents the skull from growing normally and affects the shape of the head and face. In addition, a varied number of fingers and toes are fused together (syndactyly). Type 3 – Saethre-Chotzen syndrome a genetic condition characterized by the premature fusion of certain skull bones (craniosynostosis). This early fusion prevents the skull from growing normally and affects the shape of the head and face. Type 5 – Pfeiffer syndrome a genetic disorder characterized by the premature fusion of certain skull bones (craniosynostosis). This early fusion prevents the skull from growing normally and affects the shape of the head and face. Pfeiffer syndrome also affects bones in the hands and feet.

* Blue rubber bleb nevus syndrome is a rare disorder that consists mainly of abnormal blood vessels affecting the skin or internal organs – usually the gastrointestinal tract. The disease is characterized by the presence of fluid-filled blisters (blebs) as visible, circumscribed, chronic lesions (nevus). BRBNS is caused by somatic mutations in the TEK (TIE2) gene. BRBNS is a venous malformation, formerly, though incorrectly, thought to be related to the hemangioma. It carries significant potential for serious bleeding. Lesions are most commonly found on the skin and in the small intestine and distal large bowel. Other organs with the lesions can also be found on the central nervous system, liver, and muscles. It usually presents soon after birth or during early infancy. The cause as to why blue rubber bleb nevus syndrome occurs is currently unknown. The syndrome is considered sporadic. Someone who is diagnosed with BRBNS likely has a family relative that has other multifocal venous malformations which is a symptom of the disease. Autosomal inheritance of BRBNS has been found in familial cases associated with chromosome 9p, but the majority of cases are sporadic. The disease correlates with an onset of GI complications. It is reported that GI bleeding

is the most common cause of death in most cases.

* Cat eye syndrome (CES) or Schmid–Fraccaro syndrome is a rare condition caused by an abnormal extra chromosome. This chromosome consists of the entire short arm and a small section of the long arm of chromosome 22. In consequence, individuals with the cat eye syndrome have three (trisomic) or four (tetrasomic) copies of the genetic material contained in the abnormal chromosome instead of the normal two copies. The prognosis for patients with CES varies depending on the severity of the condition and their associated signs and symptoms, specially when heart or kidney abnormalities are seen. Signs and symptoms: Unilateral or bilateral iris coloboma (absence of tissue from the colored part of the eyes), preauricular pits/tags (small depressions/growths of skin on the outer ears), anal atresia (abnormal obstruction of the anus), downward-slanting palpebral fissures (openings between the upper and lower eyelids), cleft palate, kidney problems (missing, extra, or underdeveloped kidneys), short stature, scoliosis/skeletal problems, cardiac defects (such as TAPVR), micrognathia (smaller jaw), hernias, biliary atresia, rarer malformations can affect almost any organ, intellectual disability – many are intellectually normal; about 30% of CES patients have moderately impaired mental development, although severe intellectual disability is rare. The term "cat eye" syndrome was coined because of the particular appearance of the vertical colobomas in the eyes of some patients, but over half of the CES patients in the literature do not present with this trait.

* Chediak-Higashi Syndrome is a rare autosomal recessive disorder that arises from a mutation of a lysosomal trafficking regulator protein, which leads to a decrease in phagocytosis. The decrease in phagocytosis results in recurrent pyogenic infections, albinism, and peripheral neuropathy. Chediak-Higashi syndrome is a condition that affects many parts of the body, particularly the immune system. This disease damages immune system cells, leaving them less able to fight off invaders such as viruses and bacteria. As a result, most people with Chediak-Higashi syndrome have repeated and persistent infections starting in infancy or early childhood. These infections tend to be very serious or life-threatening. Chediak-Higashi syndrome is also characterized by a condition called oculocutaneous albinism, which causes abnormally light coloring (pigmentation) of the skin, hair, and eyes. Many people with Chediak-Higashi syndrome have problems with blood clotting (coagulation) that lead to easy bruising and abnormal bleeding. In adulthood, Chediak-Higashi syndrome can also affect the nervous system, causing weakness, clumsiness, difficulty with walking, and seizures. If the disease is not successfully treated, most children with Chediak-Higashi syndrome reach a stage of the disorder known as the accelerated phase. This severe phase of the disease is thought to be triggered by a viral infection. In the accelerated phase, white blood cells (which normally help fight infection) divide uncontrollably and invade many of the body's organs. The accelerated phase is associated with fever, episodes of abnormal bleeding, overwhelming infections, and organ failure. These medical problems are usually life-threatening in childhood. A small percentage of people with Chediak-Higashi syndrome have a milder form of the condition that appears later in life. People with the adult form of the disorder have less noticeable changes in pigmentation and are less likely to have recurrent, severe infections. They do, however, have a significant risk of progressive

neurological problems such as tremors, difficulty with movement and balance (ataxia), reduced sensation and weakness in the arms and legs (peripheral neuropathy), and a decline in intellectual functioning.

* Epithelioma Basal Cell or basal cell carcinoma, is the uncontrolled growth of the skin's basal cells. These are the cells that line the deepest layer of the epidermis, the skin's outermost layer. This type of cancer rarely spreads to other parts of the body. Basal cell carcinoma usually begins as a painless bump or nodule that grows slowly. Later, it becomes an open ulcer with a hard edge. Nearly 90% of basal cell carcinomas occur on the face, but they can appear on any part of the body that is sometimes exposed to the sun—the face, ears, neck, back, chest, arms, and legs. Usually occurs in persons over age 40; it's more prevalent in blond, fair skinned males and is the most common malignant tumor affecting whites. Prolonged sun exposure is the most common cause of basal cell epithelioma, but arsenic ingestion, radiation exposure, burns, immunosuppression and, rarely, vaccinations are other possible causes. Three types of basal cell epithelioma occur: Noduloulcerative lesions occur most often on the face, particularly the forehead, eyelid margins, and nasolabial folds. In early stages, these lesions are small, smooth, pinkish, and translucent papules. Superficial basal cell epitheliomas are often numerous and commonly occur on the chest and back. They're oval or irregularly shaped, lightly pigmented plaques, with sharply defined, slightly elevated threadlike borders. Sclerosing basal cell epitheliomas (morphealike epitheliomas) is the most difficult to diagnose, and is prone to recur after apparently adequate surgery. They look like a skin-coloured, rather waxy, thickened scar. Although basal cell carcinoma almost never spreads to other organs and is rarely fatal, it can invade surrounding tissue and be disfiguring if not treated. It is mainly caused by repeated long-term exposure to sunlight. Light-skinned people who spent a lot of time in the sun as children, or who spend time in tanning booths, are especially susceptible. X-ray treatments for acne and exposure to industrial pollutants such as arsenic and hydrocarbons also increase the risk of developing basal cell carcinoma.

* Erythema Infectiosum or Fifth disease is a viral infection caused by parvovirus B19. The virus only infects humans; it's not the same parvovirus that dogs and cats can get. Fifth disease mostly affects children. Symptoms can include a low fever, cold symptoms, and a headache. Then you get a red rash on your face. It looks like a "slapped cheek." The rash can spread to the arms, legs, and trunk. Adults who get it might also have joint pain and swelling. Fifth disease spreads easily, through saliva and mucus. You can get it when an infected person coughs or sneezes. Frequently washing your hands might help prevent getting the virus. Most people become immune to the virus after having it once. Fifth disease is usually mild and goes away on its own. However, it can be serious if you: Are pregnant, are anemic, have cancer or a weak immune system.

* Freiberg disease is a form of avascular necrosis in the metatarsal bone of the foot. It generally develops in the second metatarsal, but can occur in any metatarsal. Physical stress causes multiple tiny fractures where the middle of the metatarsal meets the growth plate. These fractures impair blood flow to the end of the metatarsal resulting in

the death of bone cells (osteonecrosis). It is an uncommon condition, occurring most often in young women, athletes, and those with abnormally long metatarsals. Approximately 80% of those diagnosed are women.

* Glossitis Areata Exfoliativa or geographic tongue is characterized by irregular patches on the surface of the tongue. This gives it a map-like appearance. The exact cause of geographic tongue is unknown. It may be caused by a lack of vitamin B. It also may be due to irritation from hot or spicy foods, or alcohol. The condition appears to be less common in smokers. The change in pattern on the surface of the tongue occurs when there is a loss of the tiny, finger-like projections, called papillae, on the tongue. These areas look flat as a result. The appearance of the tongue may change very quickly. The flat-looking areas may remain for more than a month. Symptoms include: Map-like appearance to the surface of the tongue, patches that move from day to day, smooth, red patches and sores (lesions) on the tongue, soreness and burning pain (in some cases)

* Hookworm Infections are infections by a type of intestinal parasite known as a hookworm. Initially, itching and a rash may occur at the site of infection. Those only affected by a few worms may show no symptoms. Those infected by many worms may experience abdominal pain, diarrhea, weight loss, and tiredness. The mental and physical development of children may be affected. Anemia may result. Two common hookworm infections in humans are ancylostomiasis and necatoriasis, caused by the species Ancylostoma duodenale and Necator americanus respectively. Hookworm eggs are deposited in the stools of infected people. If these end up in the environment, they can hatch into larvae (immature worms), which can then penetrate the skin. One type can also be spread through contaminated food. Risk factors include walking barefoot in warm climates, where sanitation is poor. No symptoms or signs are specific for hookworm infection, but they give rise to a combination of intestinal inflammation and progressive iron-deficiency anemia and protein deficiency. Coughing, chest pain, wheezing, and fever sometimes result from severe infection. Epigastric pains, indigestion, nausea, vomiting, constipation, and diarrhea can occur early or in later stages, as well, although gastrointestinal symptoms tend to improve with time. Signs of advanced severe infection are those of anemia and protein deficiency, including emaciation, cardiac failure, and abdominal distension with ascites. Larval invasion of the skin (mostly in the Americas) can produce a skin disease called cutaneous larva migrans also known as creeping eruption. The hosts of these worms are not human and the larvae can only penetrate the upper five layers of the skin, where they give rise to intense, local itching, usually on the foot or lower leg, known as ground itch. This infection is due to larvae from the A. braziliense hookworm. The larvae migrate in tortuous tunnels between the stratum basale and stratum corneum of the skin, causing serpiginous vesicular lesions. With advancing movement of the larvae, the rear portions of the lesions become dry and crusty. The lesions are typically intensely itchy. The incubation period can vary between a few weeks to many months, and is largely dependent on the number of hookworm parasites an individual is infected with. Hookworm infections in humans include ancylostomiasis and necatoriasis. Ancylostomiasis is caused by Ancylostoma duodenale, which is the more common type

found in the Middle East, North Africa, India, and (formerly) in southern Europe. Necatoriasis is caused by Necator americanus, the more common type in the Americas, sub-Saharan Africa, Southeast Asia, China, and Indonesia. Other animals such as birds, dogs, and cats may also be affected. A. tubaeforme infects cats, A. caninum infects dogs, and A. braziliense and Uncinaria stenocephala infect both cats and dogs. Some of these infections can be transmitted to humans.

* Jacobsen syndrome is a condition caused by a loss of genetic material from chromosome 11. Because this deletion occurs at the end (terminus) of the long (q) arm of chromosome 11, Jacobsen syndrome is also known as 11q terminal deletion disorder. The signs and symptoms of Jacobsen syndrome vary considerably. Most affected individuals have delayed development, including the development of speech and motor skills (such as sitting, standing, and walking). Most also have cognitive impairment and learning difficulties. Behavioral problems have been reported, including compulsive behavior (such as shredding paper), a short attention span, and easy distractibility. Many people with Jacobsen syndrome have been diagnosed with attention-deficit/hyperactivity disorder (ADHD). Jacobsen syndrome is also associated with an increased likelihood of autism spectrum disorders, which are characterized by impaired communication and socialization skills. Jacobsen syndrome is also characterized by distinctive facial features. These include small and low-set ears, widely set eyes (hypertelorism) with droopy eyelids (ptosis), skin folds covering the inner corner of the eyes (epicanthal folds), a broad nasal bridge, downturned corners of the mouth, a thin upper lip, and a small lower jaw. Affected individuals often have a large head size (macrocephaly) and a skull abnormality called trigonocephaly, which gives the forehead a pointed appearance. More than 90 percent of people with Jacobsen syndrome have a bleeding disorder called Paris-Trousseau syndrome. This condition causes a lifelong risk of abnormal bleeding and easy bruising. Paris-Trousseau syndrome is a disorder of platelets, which are blood cells that are necessary for blood clotting. Other features of Jacobsen syndrome can include heart defects, feeding difficulties in infancy, short stature, frequent ear and sinus infections, and skeletal abnormalities. The disorder can also affect the digestive system, kidneys, and genitalia. The life expectancy of people with Jacobsen syndrome is unknown, although affected individuals have lived into adulthood.

* Leiomyosarcoma is a rare cancerous tumor of the smooth muscle cells. Smooth muscle cells make up the involuntary muscles, which are found in most parts of the body, including the uterus, stomach and intestines, the walls of all blood vessels, and the skin, so leiomyosarcomas can appear at any site in the body. They are most commonly found in the uterus, stomach, small intestine and retroperitoneum. A benign tumor originating from the same tissue is termed leiomyoma.

* Noonan syndrome (NS) is a genetic disorder that may present with mildly unusual facial features, short height, congenital heart disease, bleeding problems, and skeletal malformations. Facial features include widely spaced eyes, light-colored eyes, low-set ears, a short neck, and a small lower jaw. Heart problems may include pulmonary valve stenosis. The breast bone may either protrude or be sunken, while the spine may be

abnormally curved. Intelligence in the syndrome is often normal. Complications of NS can include leukemia. A number of genetic mutations can result in Noonan syndrome. The condition may be inherited from a person's parents as an autosomal dominant condition or occur as a new mutation. An estimated 1 in 1000 people are mildly affected by NS, while about 1 in 2,000 have a more severe form of the condition. Males appear to be affected more often than females. Noonan syndrome is one of a group of related conditions, collectively known as RASopathies. These conditions all have similar signs and symptoms and are caused by changes in the same cell signaling pathway.

* Oculosympathetic Syndrome or Horner syndrome is a disorder that affects the eye and surrounding tissues on one side of the face and results from paralysis of certain nerves. Horner syndrome can appear at any time of life; in about 5 percent of affected individuals, the disorder is present from birth (congenital). Horner syndrome is characterized by drooping of the upper eyelid (ptosis) on the affected side, a constricted pupil in the affected eye (miosis) resulting in unequal pupil size (anisocoria), and absent sweating (anhidrosis) on the affected side of the face. Sinking of the eye into its cavity (enophthalmos) and a bloodshot eye often occur in this disorder. In people with Horner syndrome that occurs before the age of 2, the colored part (iris) of the eyes may differ in color (iris heterochromia), with the iris of the affected eye being lighter in color than that of the unaffected eye. Individuals who develop Horner syndrome after age 2 do not generally have iris heterochromia. The abnormalities in the eye area related to Horner syndrome do not generally affect vision or health. However, the nerve damage that causes Horner syndrome may result from other health problems, some of which can be life-threatening.

* Plagiocephaly Nonsynostotic or nonsynostotic plagiocephaly (NSP) is defined as the deformation of the head resulting from external forces that mould the skull during the first months of life. Four months seems to be a critical age for the development of NSP, but many positional head shape deformities may improve with time. Early assessment and diagnosis is impEarly identification of a preferred head orientation, which may indicate the presence of neck muscle dysfunction, may help prevent the development or further development of nonsynostotic plagiocephaly in infants. Plagiocephaly might also be prevented by varying the head position when putting the very young infant down to sleep and by giving supervised tummy time when awake.ortant not only for the shape of the skull, but also for possible clinical significant differences in gross motor development.

* Poikiloderma of Civatte is a chronic, non-cancerous (benign) skin condition in fair-skinned adults, which is probably caused by long-term sun exposure. Poikiloderma of Civatte shows a specific pattern of color change in the skin due to sun damage to the neck and sometimes the center of the chest. Poikiloderma of Civatte is a cosmetic problem typically affecting women more frequently than men. This condition is more common with increased age. Poikiloderma of Civatte usually affects the front and sides of the neck. The center of the chest is also sometimes affected. You will notice darkened skin color (hyperpigmentation) and lightened skin color (hypopigmentation) as well as redness (erythema). Fine blood vessels in the skin are often seen.

* Reticulohistiocytoma (RH) is a rare benign lesion of the soft tissue. It belongs to a group of disorders called non-Langerhans cell histiocytosis and is a type of reticulohistiocytosis, all of which are types of histiocytosis. Histiocytosis is a condition in which there is rapid production (proliferation) of histiocytes (immune cells) in the skin or soft tissues. The stimulus that causes the immune system to react in RH is currently not well understood. RH present as a yellow to reddish-brown smooth surfaced, firm nodule or lesion on the trunk and/or extremities of the body. Historically, RH has been found in young adults, with a slightly higher incidence in males. RH typically resolve spontaneously over a period of months to years, are not associated with systemic disease, and do not otherwise affect health.

* Reye Syndrome is a rare illness that can affect the blood, liver, and brain of someone who has recently had a viral infection. It always follows another illness. Although it mostly affects children and teens, anyone can get it. It can develop quickly and without warning. It is most common during flu season. Symptoms include: Nausea and vomiting, listlessness, personality change - such as irritability, combativeness or confusion, delirium, convulsions, loss of consciousness. If these symptoms occur soon after a viral illness, seek medical attention immediately. Reye syndrome can lead to a coma and brain death, so quick diagnosis and treatment are critical. Treatment focuses on preventing brain damage. The cause of Reye syndrome is unknown. Studies have shown that taking aspirin increases the risk of getting it. Because of that, health care professionals now recommend other pain relievers for young patients. Changes on blood tests may include a high blood ammonia level, low blood sugar level, and prolonged prothrombin time. Often the liver is enlarged.

* Russell Silver Syndrome is a rare congenital growth disorder. It is one of 200 types of dwarfism and one of five types of primordial dwarfism. This syndrome occurs in approximately one out of every 50,000 to 100,000 births. Males and females seem to be affected with equal frequency. Russell-Silver syndrome is a growth disorder characterized by slow growth before and after birth. Babies with this condition have a low birth weight and often fail to grow and gain weight at the expected rate (failure to thrive). Head growth is normal, however, so the head may appear unusually large compared to the rest of the body. Affected children are thin and have poor appetites, and some develop recurrent episodes of low blood sugar (hypoglycemia) as a result of feeding difficulties. Adults with Russell-Silver syndrome are short; the average height for affected men is about 151 centimeters (4 feet, 11 inches) and the average height for affected women is about 140 centimeters (4 feet, 7 inches). Many children with Russell-Silver syndrome have a small, triangular face with distinctive facial features including a prominent forehead, a narrow chin, a small jaw, and downturned corners of the mouth. Other features of this disorder can include an unusual curving of the fifth finger (clinodactyly), asymmetric or uneven growth of some parts of the body, and digestive system abnormalities. Russell-Silver syndrome is also associated with an increased risk of delayed development, speech and language problems, and learning disabilities.

* Schwannoma is a usually benign nerve sheath tumor composed of Schwann cells,

which normally produce the insulating myelin sheath covering peripheral nerves. Schwannomas are homogeneous tumors, consisting only of Schwann cells. The tumor cells always stay on the outside of the nerve, but the tumor itself may either push the nerve aside and/or up against a bony structure (thereby possibly causing damage). Schwannomas are relatively slow-growing. For reasons not yet understood, schwannomas are mostly benign and less than 1% become malignant, degenerating into a form of cancer known as neurofibrosarcoma.

* Septo-optic dysplasia (SOD), known also as de Morsier syndrome, is a rare congenital malformation syndrome that features a combination of the underdevelopment of the optic nerve, pituitary gland dysfunction, and absence of the septum pellucidum (a midline part of the brain). Two or more of these features need to be present for a clinical diagnosis — only 30% of patients have all three. In affected individuals, the optic nerves are abnormally small and make fewer connections than usual between the eyes and the brain. As a result, people with optic nerve hypoplasia have impaired vision in one or both eyes. Optic nerve hypoplasia can also be associated with unusual side-to-side eye movements (nystagmus) and other eye abnormalities. Tthe abnormal development of structures separating the right and left halves of the brain, include the corpus callosum, which is a band of tissue that connects the two halves of the brain, and the septum pellucidum, which separates the fluid-filled spaces called ventricles in the brain. Depending on which structures are affected, abnormal brain development can lead to intellectual disability and other neurological problems. Pituitary hypoplasia causes growth hormone deficiency, which results in slow growth and unusually short stature. Severe cases cause panhypopituitarism, a condition in which the pituitary produces no hormones. Panhypopituitarism is associated with slow growth, low blood sugar (hypoglycemia), genital abnormalities, and problems with sexual development.

* Shigella Infections General or shigellosis is a bacterial infection of the lining of the intestines. There are several types of shigella bacteria, including: Shigella sonnei, also called "group D" shigella, is responsible for most cases of shigellosis in the United States. Shigella flexneri, or "group B" shigella, causes almost all other cases. Shigella dysenteriae, or "group A" shigella is rare in the United States. However, it can lead to deadly outbreaks in developing countries. People infected with the bacteria release it into their stool. They can spread the bacteria to water or food, or directly to another person. Getting just a little bit of the shigella bacteria into your mouth is enough to cause infection. Outbreaks of shigellosis are linked with poor sanitation, contaminated food and water, and crowded living conditions. Shigellosis is common among travelers in developing countries and workers or residents in refugee camps. In the United States, the condition is most commonly seen in daycare centers and places where groups of people live, such as nursing homes. Symptoms often develop about 1 to 7 days (average 3 days) after coming into contact with the bacteria. Symptoms include: Acute (sudden) abdominal pain or cramping, acute fever, blood, mucus, or pus in the stool, crampy rectal pain, nausea and vomiting, watery and bloody diarrhea.

* Situs Inversus (also called situs transversus or oppositus) is a congenital condition in which the major visceral organs are reversed or mirrored from their normal positions.

The normal arrangement of internal organs is known as situs solitus. Although cardiac problems are more common, many people with situs inversus have no medical symptoms or complications resulting from the condition, and until the advent of modern medicine, it was usually undiagnosed. An uncommon form of situs inversus is isolated levocardia, in which the position of the heart is not mirrored alongside the other organs. Isolated levocardia carries a risk of heart defects, and so patients with the condition may require surgery to correct them. In rarer cases such as situs ambiguus or heterotaxy, situs cannot be determined. In these patients, the liver may be midline, the spleen absent or multiple, and the bowel malrotated. Often, structures are duplicated or absent altogether. This is more likely to cause medical problems than situs inversus totalis.

* Supraglottitis or epiglottitis is inflammation of the epiglottis. This is the tissue that covers the trachea (windpipe). Epiglottitis can be a life-threatening disease. The epiglottis is a stiff, yet flexible tissue (called cartilage) at the back of the tongue. It closes your windpipe (trachea) when you swallow so food does not enter your airway. This helps prevent coughing or choking after swallowing. In children, epiglottitis is usually caused by the bacteria Haemophilus influenzae (H influenzae) type B. In adults, it is often due to other bacteria such as Strepcoccus pneumoniae, or viruses such as herpes simplex virus and varicella-zoster. Epiglottitis is now very uncommon because the H influenzae type B (Hib) vaccine is given routinely to all children. The disease was once most often seen in children ages 2 through 6. In rare cases, epiglottitis can occur in adults. Epiglottitis begins with a high fever and sore throat. Other symptoms may include: Abnormal breathing sounds (stridor), fever, blue skin color (cyanosis), drooling, difficulty breathing (the person may need to sit upright and lean slightly forward to breathe), difficulty swallowing, voice changes (hoarseness). The airways can become totally blocked, which can result in cardiac arrest and death.

* Taenia Infections or taeniasis is an infection within the intestines by adult tapeworms belonging to the genus Taenia. There are generally no or only mild symptoms. Symptoms may occasionally include weight loss or abdominal pain. Segments of tapeworm may be seen in the stool. Complications of pork tapeworm may include cysticercosis. Types of Taenia that cause infections in humans include Taenia solium (pork tapeworm), Taenia saginata (beef tapeworm), and Taenia asiatica (Asian tapeworm). Taenia saginata is due to eating contaminated undercooked beef while Taenia solium and Taenia asiatica is from contaminated undercooked pork. Taeniasis generally has few or no symptoms. It takes about 8 weeks from infection for adult worms to form and can last for years without treatment. Infection may be suspected when a portion of the worm is passed in the stool. It is not generally fatal.

* Tetrahydrobiopterin deficiency is a rare disorder characterized by a shortage (deficiency) of a molecule called tetrahydrobiopterin or BH4. This condition alters the levels of several substances in the body, including phenylalanine. Phenylalanine is a building block of proteins (an amino acid) that is obtained through the diet. It is found in foods that contain protein and in some artificial sweeteners. High levels of phenylalanine are present from early infancy in people with untreated tetrahydrobiopterin deficiency. This condition also alters the levels of chemicals called

neurotransmitters, which transmit signals between nerve cells in the brain. Infants with tetrahydrobiopterin deficiency appear normal at birth, but medical problems ranging from mild to severe become apparent over time. Signs and symptoms of this condition can include intellectual disability, progressive problems with development, movement disorders, difficulty swallowing, seizures, behavioral problems, and an inability to control body temperature.

* Trichomonas Infections or trichomoniasis is a sexually transmitted infection caused by the parasite Trichomonas vaginalis. Trichomoniasis ("trich") is found worldwide. In the United States, most cases occur in women between ages 16 and 35. Trichomonas vaginalis is spread through sexual contact with an infected partner, either through penis-to-vagina intercourse or vulva-to-vulva contact. The parasite cannot survive in the mouth or rectum. The disease can affect both men and women, but the symptoms differ. The infection usually does not cause symptoms in men and goes away on its own in a few weeks. Women may have these symptoms: Discomfort with intercourse, itching of the inner thighs, vaginal discharge (thin, greenish-yellow, frothy or foamy), vaginal or vulvar itching, or swelling of the labia, vaginal odor (foul or strong smell). Men who have symptoms may have: Burning after urination or ejaculation, itching of urethra, slight discharge from urethra. Occasionally, some men with trichomoniasis may develop: swelling and irritation in the prostate gland (prostatitis). Swelling in the epididymis (epididymitis), the tube that connects the testicle with the vas deferens. The vas deferens connects the testicles to the urethra.

* Trichorhinophalangeal Syndrome Type II or Langer–Giedion syndrome (LGS) is a very uncommon autosomal dominant genetic disorder caused by a deletion of a small section of material on chromosome 8. Trichorhinophalangeal syndrome type II (TRPS II) is a condition that causes bone and joint malformations; distinctive facial features; intellectual disability; and abnormalities of the skin, hair, teeth, sweat glands, and nails. The name of the condition describes some of the areas of the body that are commonly affected: hair (tricho-), nose (rhino-), and fingers and toes (phalangeal). People with this condition have multiple noncancerous (benign) bone tumors called osteochondromas. Affected individuals may develop a few to several hundred osteochondromas. These bone growths typically begin in infancy to early childhood and stop forming around adolescence. Depending on the location of the osteochondromas, they can cause pain, limited range of joint movement, or damage to blood vessels or the spinal cord. Individuals with TRPS II may have reduced bone mineral density (osteopenia). Affected individuals often have slow growth before and after birth resulting in short stature. In TRPS II, the ends (epiphyses) of one or more bones in the fingers or toes are abnormally cone-shaped. Additionally, the fingernails and toenails are typically thin and abnormally formed. The characteristic appearance of individuals with TRPS II involves thick eyebrows; a broad nose with a rounded tip; a long, smooth area between the nose and the upper lip (philtrum); a thin upper lip; and small teeth that are either decreased (oligodontia) or increased (supernumerary) in number. Almost all affected individuals have sparse scalp hair. Males are particularly affected by hair loss, with many being nearly or completely bald soon after puberty. Some children with this condition have loose skin, but the skin becomes tighter over time. Individuals with TRPS II may

experience excessive sweating (hyperhidrosis). Most individuals with TRPS II have mild intellectual disability.

* Typhus Sao Paulo or Rocky Mountain spotted fever (RMSF) is a disease caused by a type of bacteria carried by ticks. RMSF is caused by the bacterium Rickettsia rickettsii (R Rickettsii), which is carried by ticks. The bacteria spread to humans through a tick bite. In the western United States, the bacteria are carried by the wood tick. In the eastern US, they are carried by the dog tick. Other ticks spread the infection in the southern US and in Central and South America. Contrary to the name "Rocky Mountain," most recent cases have been reported in the eastern US. States include North and South Carolina, Virginia, Georgia, Tennessee, and Oklahoma. Most cases occur in the spring and summer and are found in children. Risk factors include recent hiking or exposure to ticks in an area where the disease is known to occur. The bacteria are unlikely to be transmitted to a person by a tick that has been attached for less than 20 hours. Only about 1 in 1,000 wood and dog ticks carry the bacteria. Bacteria can also infect people who crush ticks they have removed from pets with their bare fingers. Symptoms usually develop about 2 to 14 days after the tick bite. They may include: Chills and fever, confusion, headache, muscle pain, rash -- usually starts a few days after the fever; first appears on wrists and ankles as spots that are 1 to 5 mm in diameter, then spreads to most of the body. Some infected people don't get a rash.

* Wolfram Syndrome is a condition that affects many of the body's systems. The hallmark features of Wolfram syndrome are high blood sugar levels resulting from a shortage of the hormone insulin (diabetes mellitus) and progressive vision loss due to degeneration of the nerves that carry information from the eyes to the brain (optic atrophy). People with Wolfram syndrome often also have pituitary gland dysfunction that results in the excretion of excessive amounts of urine (diabetes insipidus), hearing loss caused by changes in the inner ear (sensorineural deafness), urinary tract problems, reduced amounts of the sex hormone testosterone in males (hypogonadism), or neurological or psychiatric disorders. About 60 percent of people with Wolfram syndrome develop a neurological or psychiatric disorder, most commonly problems with balance and coordination (ataxia), typically beginning in early adulthood. Other neurological problems experienced by people with Wolfram syndrome include irregular breathing caused by the brain's inability to control breathing (central apnea), loss of the sense of smell, loss of the gag reflex, muscle spasms (myoclonus), seizures, reduced sensation in the lower extremities (peripheral neuropathy), and intellectual impairment. Psychiatric disorders associated with Wolfram syndrome include psychosis, episodes of severe depression, and impulsive and aggressive behavior. There are two types of Wolfram syndrome with many overlapping features. The two types are differentiated by their genetic cause. In addition to the usual features of Wolfram syndrome, individuals with Wolfram syndrome type 2 have stomach or intestinal ulcers and excessive bleeding after an injury. The tendency to bleed excessively combined with the ulcers typically leads to abnormal bleeding in the gastrointestinal system. People with Wolfram syndrome type 2 do not develop diabetes insipidus. Wolfram syndrome is often fatal by mid-adulthood due to complications from the many features of the condition, such as health problems related to diabetes mellitus or neurological problems.

* Wolman Disease or lysosomal acid lipase deficiency is an inherited condition characterized by problems with the breakdown and use of fats and cholesterol in the body (lipid metabolism). In affected individuals, harmful amounts of fats (lipids) accumulate in cells and tissues throughout the body, which typically causes liver disease. There are two forms of the condition. The most severe and rarest form begins in infancy. The less severe form can begin from childhood to late adulthood. In the later-onset form of lysosomal acid lipase deficiency, signs and symptoms vary and usually begin in mid-childhood, although they can appear anytime up to late adulthood. Nearly all affected individuals develop an enlarged liver (hepatomegaly); an enlarged spleen (splenomegaly) may also occur. About two-thirds of individuals have liver fibrosis, eventually leading to cirrhosis. Approximately one-third of individuals with the later-onset form have malabsorption, diarrhea, vomiting, and steatorrhea. Individuals with this form of lysosomal acid lipase deficiency may have increased liver enzymes and high cholesterol levels, which can be detected with blood tests.

1.1.33 RTS-25

https://archive.org/details/Resonant_Therapy_Sessions_25

Anaplasmosis; Barrett Syndrome; Brucellosis; Chordoma; Contiguous Gene Syndrome Williams; Covid-19; Exomphalos-Beckwith; Evans Syndrome; Funnel Chest; Gastritis Hypertrophic; Graft vs Host Disease; Granulomatous Cheilitis; Hypocupremia Congenital; Krukenberg Tumor; Larsen Syndrome; Monocular Blindness Transient; Myelitis; Myelopathy; Neuroblastoma; Neuroretinoangiomatosis; Ochoa Syndrome; Postcommissurotomy Syndrome; Prune Belly Syndrome; Q Fever; Quadrantanopsia

* Anaplasmosis is a disease caused by a rickettsial parasite of ruminants, Anaplasma spp and is therefore related to rickettsial disease. Anaplasmosis is an infectious but not contagious disease. Anaplasmosis can be transmitted through mechanical and biological vector processes. Anaplasmosis can also be referred to as "yellow bag" or "yellow fever" because the infected animal can develop a jaundiced look. Other signs of infection include, but are not limited to, weight loss, diarrhea, paleness of the skin, aggressive behavior, and high fever. There are many different tick species that can carry the bacteria able to cause anaplasmosis, but the two major species include Anaplasma marginale and Anaplasma phagocytophilum. The microorganisms that carry a blood parasite under the Anaplasma genus and cause anaplasmosis are Gram-negative, and infect red blood cells. Once the host is infected with anaplasmosis, the immune system will try to fight off and kill the infected red blood cells, but will also kill healthy red blood cells. Classic signs and symptoms of anaplasmosis will not occur until 3-6 weeks after infection. The most common symptoms of anaplasmosis include fever, a decreased number of white blood cells, platelets in the bloodstream, and abnormally elevated

levels of liver enzymes. The erythema chronicum migrans rash may be seen with anaplasmosis as it is co-transmitted in 10% of Lyme disease cases. Anemia may be severe and result in cardiovascular changes such as an increase in heart rate. Blood in the urine may occur due to the lysis of red blood cells. General systemic signs include diarrhea, anorexia, and weight loss. Infected animals may develop a jaundiced look which then turns into paleness around the eyes, muzzle, lips, and teats of the cattle. All cattle are susceptible to infection by Anaplasma marginale, but the severity worsens with age increase. Older cattle tend to exhibit the most severe clinical symptoms; cattle aged 1-3 may also show severe symptoms but are able to recover easier.

* Barrett Syndrome (alternate to Barrett Esophagus?)

* Brucellosis is a bacterial infection that occurs from contact with animals carrying brucella bacteria. Brucella can infect cattle, goats, camels, dogs, and pigs. The bacteria can spread to humans if you come in contact with infected meat or the placenta of infected animals, or if you eat or drink unpasteurized milk or cheese. Brucellosis is rare in the United States. About 100 to 200 cases occur each year. Most cases are caused by the Brucellosis melitensis bacteria. People working in jobs where they often come in contact with animals or meat -- such as slaughterhouse workers, farmers, and veterinarians -- are at higher risk. Acute brucellosis may begin with mild flu-like symptoms, or symptoms such as: Abdominal pain, back pain, fever and chills, excessive sweating, fatigue, headache, joint and muscle pain, loss of appetite, swollen glands, weakness, weight loss.

* Chordoma is a rare type of cancerous tumor that can occur anywhere along the spine, from the base of the skull to the tailbone. Chordomas grow slowly, gradually extending into the bone and soft tissue around them. They often recur after treatment, and in about 40 percent of cases the cancer spreads (metastasizes) to other areas of the body, such as the lungs.
Approximately half of all chordomas occur at the base of the spine (sacrum), about one third occur in the base of the skull (occiput), and the rest occur in the cervical (neck), thoracic (upper back), or lumbar (lower back) vertebrae of the spine. As the chordoma grows, it puts pressure on the adjacent areas of the brain or spinal cord, leading to the signs and symptoms of the disorder. A chordoma anywhere along the spine may cause pain, weakness, or numbness in the back, arms, or legs. A chordoma at the base of the skull (occipital chordoma) may lead to double vision (diplopia) and headaches. A chordoma that occurs in the tailbone (coccygeal chordoma) may result in a lump large enough to be felt through the skin and may cause problems with bladder or bowel function. Chordomas typically occur in adults between ages 40 and 70. About 5 percent of chordomas are diagnosed in children. For reasons that are unclear, males are affected about twice as often as females.

* Contiguous Gene Syndrome Williams (also Elfin Facies Syndrome, William-Beuren Syndrome and Williams Syndrome) Williams syndrome is caused by a genetic abnormality, specifically a deletion of about 27 genes from the long arm of one of the two chromosome 7s. In a small number of cases, it is inherited from an affected parent

in an autosomal dominant manner. Williams syndrome is a developmental disorder that affects many parts of the body. This condition is characterized by mild to moderate intellectual disability or learning problems, unique personality characteristics, distinctive facial features, and heart and blood vessel (cardiovascular) problems. People with Williams syndrome typically have difficulty with visual-spatial tasks such as drawing and assembling puzzles, but they tend to do well on tasks that involve spoken language, music, and learning by repetition (rote memorization). Affected individuals have outgoing, engaging personalities and tend to take an extreme interest in other people. Attention deficit disorder (ADD), problems with anxiety, and phobias are common among people with this disorder. Young children with Williams syndrome have distinctive facial features including a broad forehead, a short nose with a broad tip, full cheeks, and a wide mouth with full lips. Many affected people have dental problems such as teeth that are small, widely spaced, crooked, or missing. In older children and adults, the face appears longer and more gaunt. A form of cardiovascular disease called supravalvular aortic stenosis (SVAS) occurs frequently in people with Williams syndrome. Supravalvular aortic stenosis is a narrowing of the large blood vessel that carries blood from the heart to the rest of the body (the aorta). If this condition is not treated, the aortic narrowing can lead to shortness of breath, chest pain, and heart failure. Other problems with the heart and blood vessels, including high blood pressure (hypertension), have also been reported in people with Williams syndrome. Additional signs and symptoms of Williams syndrome include abnormalities of connective tissue (tissue that supports the body's joints and organs) such as joint problems and soft, loose skin. Affected people may also have increased calcium levels in the blood (hypercalcemia) in infancy, developmental delays, problems with coordination, and short stature. Medical problems involving the eyes and vision, the digestive tract, and the urinary system are also possible.

* Covid-19 or Coronavirus disease 2019 is a contagious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Symptoms of COVID-19 are variable, but often include fever, cough, headache, fatigue, breathing difficulties, and loss of smell and taste. Symptoms may begin one to fourteen days after exposure to the virus. At least a third of people who are infected do not develop noticeable symptoms. Of those people who develop symptoms noticeable enough to be classed as patients, most (81%) develop mild to moderate symptoms (up to mild pneumonia), while 14% develop severe symptoms (dyspnea, hypoxia, or more than 50% lung involvement on imaging), and 5% suffer critical symptoms (respiratory failure, shock, or multiorgan dysfunction). Older people are at a higher risk of developing severe symptoms. Some people continue to experience a range of effects (long COVID) for months after recovery, and damage to organs has been observed. COVID-19 transmits when people breathe in air contaminated by droplets and small airborne particles containing the virus. The risk of breathing these in is highest when people are in close proximity, but they can be inhaled over longer distances, particularly indoors. Transmission can also occur if splashed or sprayed with contaminated fluids in the eyes, nose or mouth, and, rarely, via contaminated surfaces. People remain contagious for up to 20 days, and can spread the virus even if they do not develop symptoms.

* Exomphalos-Beckwith or Beckwith–Wiedemann syndrome is a condition that affects many parts of the body. It is classified as an overgrowth syndrome, which means that affected infants are considerably larger than normal (macrosomia) and tend to be taller than their peers during childhood. Growth begins to slow by about age 8, and adults with this condition are not unusually tall. In some children with Beckwith-Wiedemann syndrome, specific parts of the body on one side or the other may grow abnormally large, leading to an asymmetric or uneven appearance. This unusual growth pattern, which is known as hemihyperplasia, usually becomes less apparent over time. The signs and symptoms of Beckwith-Wiedemann syndrome vary among affected individuals. Some children with this condition are born with an opening in the wall of the abdomen (an omphalocele) that allows the abdominal organs to protrude through the belly-button. Other abdominal wall defects, such as a soft out-pouching around the belly-button (an umbilical hernia), are also common. Some infants with Beckwith-Wiedemann syndrome have an abnormally large tongue (macroglossia), which may interfere with breathing, swallowing, and speaking. Other major features of this condition include abnormally large abdominal organs (visceromegaly), creases or pits in the skin near the ears, low blood sugar (hypoglycemia) in infancy, and kidney abnormalities. Children with Beckwith-Wiedemann syndrome are at an increased risk of developing several types of cancerous and noncancerous tumors, particularly a form of kidney cancer called Wilms tumor and a form of liver cancer called hepatoblastoma. Tumors develop in about 10 percent of people with this condition and almost always appear in childhood. Most children and adults with Beckwith-Wiedemann syndrome do not have serious medical problems associated with the condition. Their life expectancy is usually normal.

* Evans syndrome is an autoimmune disease in which an individual's immune system attacks their own red blood cells and platelets, the syndrome can include immune neutropenia. These immune cytopenias may occur simultaneously or sequentially. Its overall phenotype resembles a combination of autoimmune hemolytic anemia and immune thrombocytopenic purpura. Autoimmune hemolytic anemia is a condition in which the red blood cells that normally carry oxygen and carbon dioxide are destroyed by an autoimmune process. Immune thrombocytopenic purpura is a condition in which platelets are destroyed by an autoimmune process. Platelets are a component of blood that contribute to the formation of blood clots in the body to prevent bleeding.

* Funnel Chest or Pectus excavatum is a medical term that describes an abnormal formation of the rib cage that gives the chest a caved-in or sunken appearance. Pectus excavatum occurs in a baby who is developing in the womb. It can also develop in a baby after birth. The condition can be mild or severe. Pectus excavatum is due to too much growth of the connective tissue that joins the ribs to the breastbone (sternum). This causes the sternum to grow inward. As a result, there is a depression in the chest over the sternum, which may appear quite deep. If the condition is severe, the heart and lungs can be affected. Also, the way the chest looks may cause emotional stress for the child. The exact cause is unknown. Pectus excavatum occurs by itself. There may be a family history of the condition or perhaps other medical problems linked with this condition.

* Gastritis Hypertrophic is a premalignant disorder of the stomach characterized by overgrowth of the stomach lining (the gastric mucosa) and hypoalbuminemia (low blood serum level of albumin) due to loss of albumin by the stomach. The abnormalities of the stomach are highly characteristic with giant folds, excess mucus secretion by the lining of the stomach, and hypochlorhydria (decreased acid secretion by the stomach). The disease tends to lead to stomach cancer. Symptoms include nausea, vomiting, pain in the abdomen, swelling, poor appetite, and weight loss. The overgrowth of the stomach lining (gastric hypertrophy) appears to be due to activation of the receptor for epidermal growth factor in the stomach.

* Graft vs Host Disease (GvHD) is a syndrome, characterized by inflammation in different organs. GvHD is commonly associated with bone marrow transplants and stem cell transplants. White blood cells of the donor's immune system which remain within the donated tissue (the graft) recognize the recipient (the host) as foreign (non-self). The white blood cells present within the transplanted tissue then attack the recipient's body's cells, which leads to GvHD. This should not be confused with a transplant rejection, which occurs when the immune system of the transplant recipient rejects the transplanted tissue; GvHD occurs when the donor's immune system's white blood cells reject the recipient. The underlying principle (alloimmunity) is the same, but the details and course may differ. GvHD can also occur after a blood transfusion if the blood products used have not been irradiated or treated with an approved pathogen reduction system. The chronic form of graft-versus-host-disease (cGvHD) normally begins 90 to 600 days post-transplant. The appearance of moderate to severe cases of cGVHD adversely influences long-term survival. The first symptom of cGvHD is commonly a rash on the palms of the hands or the soles of the feet, and the rash can spread and is usually itchy and dry. In severe cases, the skin may blister and peel, like a bad sunburn. A fever may also develop.

* Granulomatous Cheilitis or Melkersson-Rosenthal syndrome is a rare neurological disorder characterized by recurring facial paralysis, swelling of the face and lips (usually the upper lip), and the development of folds and furrows in the tongue. Onset is in childhood or early adolescence. After recurrent attacks (ranging from days to years in between), swelling may persist and increase, eventually becoming permanent. The lip may become hard, cracked, and fissured with a reddish-brown discoloration. The cause of Melkersson-Rosenthal syndrome is unknown, but there may be a genetic predisposition. It can be symptomatic of Crohn's disease or sarcoidosis. Melkersson-Rosenthal syndrome may recur intermittently after its first appearance. It can become a chronic disorder. Follow-up care should exclude the development of Crohn's disease or sarcoidosis.

* Hypocupremia Congenital or Menkes syndrome is a disorder that affects copper levels in the body. It is characterized by sparse, kinky hair; failure to gain weight and grow at the expected rate (failure to thrive); and deterioration of the nervous system. Additional signs and symptoms include weak muscle tone (hypotonia), sagging facial features, seizures, developmental delay, and intellectual disability. Children with Menkes

syndrome typically begin to develop symptoms during infancy and often do not live past age 3. Early treatment with copper may improve the prognosis in some affected individuals. In rare cases, symptoms begin later in childhood. Occipital horn syndrome (sometimes called X-linked cutis laxa) is a less severe form of Menkes syndrome that begins in early to middle childhood. It is characterized by wedge-shaped calcium deposits in a bone at the base of the skull (the occipital bone), coarse hair, and loose skin and joints.

* Krukenberg Tumor refers to a malignancy in the ovary that metastasized from a primary site, classically the gastrointestinal tract, although it can arise in other tissues such as the breast. Gastric adenocarcinoma, especially at the pylorus, is the most common source. Krukenberg tumors are often (over 80%) found in both ovaries, consistent with its metastatic nature. Krukenberg tumors can be seen in all age groups, with an average age of 45 years. In most countries, cancer that has metastasized to the ovary accounts for only about 1 to 2% of ovarian cancer; in the remainder, the ovary itself is the primary cancer site. However, in Japan they represent a much higher percentage of malignancies in the ovary (almost 20%) due to the increased prevalence of gastric cancer. Krukenberg tumors account for about 15% of metastatic cancers that initially appear to have arisen in the ovary, and as such is less common than metastasis arising from ovarian epithelial and germ-cell tumors. In people who have had nongynecologic malignancy, approximately 20% of adnexal masses are malignant, and 60% of these are Krukenberg tumors. Krukenberg tumors often come to the attention when they cause abdominal or pelvic pain, bloating, ascites, or pain during sexual intercourse. Krukenberg tumors can occasionally provoke a reaction of the ovarian stroma which leads to hormone production, that results in vaginal bleeding, a change in menstrual habits, or hirsutism, or occasionally virilization as a main symptom. In rare cases the disease can manifest with hydronephrosis and hydroureter.

* Larsen syndrome is a disorder that affects the development of bones throughout the body. The signs and symptoms of Larsen syndrome vary widely even within the same family. Affected individuals are usually born with dislocations of the hips, knees, or elbows. Foot abnormalities, such as inward- and upward-turning feet (clubfeet), are also common. Affected individuals generally have small extra bones in their wrists and ankles that are visible on x-ray images. The tips of their fingers, especially the thumbs, are typically blunt and square-shaped (spatulate). Characteristic facial features in people with Larsen syndrome include a prominent forehead (frontal bossing), flattening of the bridge of the nose and middle of the face (midface hypoplasia), and wide-set eyes (ocular hypertelorism). Many people with Larsen syndrome have an opening in the roof of the mouth (a cleft palate). Affected individuals may also have hearing loss caused by malformations in tiny bones in the ears (ossicles). Short stature is a common feature of Larsen syndrome. In addition, people with the condition may have an unusually large range of joint movement (hypermobility) or joint deformities (contractures) that restrict movement. People with Larsen syndrome can also have abnormal curvature of the spine (kyphosis or scoliosis) that can impair breathing or compress the spinal cord and lead to weakness of the limbs. Some affected individuals experience respiratory problems, such as partial closing of the airways, short pauses in

breathing (apnea), and frequent respiratory infections. Heart and kidney problems can also occur in people with Larsen syndrome. People with this condition can survive into adulthood. Their intellectual function is usually unaffected.

* Monocular Blindness Transient or Amaurosis fugax is a temporary loss of vision in one or both eyes due to a lack of blood flow to the retina. The retina is the light-sensitive layer of tissue at the back of the eyeball. Amaurosis fugax is not itself a disease. Instead, it is a sign of other disorders. Amaurosis fugax can occur from different causes. One cause is when a blood clot or a piece of plaque blocks an artery in the eye. The blood clot or plaque usually travels from a larger artery, such as the carotid artery in the neck or an artery in the heart, to an artery in the eye. Plaque is a hard substance that forms when fat, cholesterol, and other substances build up in the walls of arteries. Risk factors include: Heart disease, especially irregular heartbeat, alcohol abuse, cocaine use, diabetes, family history of stroke, high blood pressure, high cholesterol, increasing age, smoking (people who smoke one pack a day double their risk for a stroke). Amaurosis fugax can also occur because of other disorders such as: Other eye problems, such as inflammation of the optic nerve (optic neuritis), blood vessel disease called polyarteritis nodosa, migraine headaches, brain tumor, head injury, multiple sclerosis (MS), inflammation of the nerves due to the body's immune cells attacking the nervous system, systemic lupus erythematosus, an autoimmune disease in which the body's immune cells attack healthy tissue throughout the body. Symptoms include the sudden loss of vision in one or both eyes. This usually lasts for a few seconds to several minutes. Afterward, vision returns to normal. Some people describe the loss of vision as a gray or black shade coming down over the eye.

* Myelitis is inflammation of the spinal cord which can disrupt the normal responses from the brain to the rest of the body, and from the rest of the body to the brain. Inflammation in the spinal cord, can cause the myelin and axon to be damaged resulting in symptoms such as paralysis and sensory loss. Myelitis is classified to several categories depending on the area or the cause of the lesion; however, any inflammatory attack on the spinal cord is often referred to as transverse myelitis. Myelitis lesions usually occur in a narrow region but can be spread and affect many areas. Acute flaccid myelitis: a polio-like syndrome that causes muscle weakness and paralysis. Poliomyelitis: disease caused by viral infection in the gray matter with symptoms of muscle paralysis or weakness. Transverse myelitis: caused by axonal demyelination encompassing both sides of the spinal cord. Leukomyelitis: lesions in the white matter. Meningococcal myelitis (or meningomyelitis): lesions occurring in the region of meninges and the spinal cord. Osteomyelitis of the vertebral bone surrounding the spinal cord (that is, vertebral osteomyelitis) is a separate condition, although some infections (for example, Staphylococcus aureus infection) can occasionally cause both at once. The similarity of the words reflects that the combining form myel(o)- has multiple (homonymous) senses referring to bone marrow or the spinal cord. Depending on the cause of the disease, such clinical conditions manifest different speed in progression of symptoms in a matter of hours to days. Most myelitis manifests fast progression in muscle weakness or paralysis starting with the legs and then arms with varying degrees of severity. Sometimes the dysfunction of arms or legs cause instability

of posture and difficulty in walking or any movement. Also symptoms generally include paresthesia which is a sensation of tickling, tingling, burning, pricking, or numbness of a person's skin with no apparent long-term physical effect. Adult patients often report pain in the back, extremities, or abdomen. Patients also present increased urinary urgency, bowel or bladder dysfunctions such as bladder incontinence, difficulty or inability to void, and incomplete evacuation of bowel or constipation. Others also report fever, respiratory problems and intractable vomiting.

* Myelopathy describes any neurologic deficit related to the spinal cord. When due to trauma, it is known as (acute) spinal cord injury. When inflammatory, it is known as myelitis. Disease that is vascular in nature is known as vascular myelopathy. The most common form of myelopathy in humans, cervical spondylotic myelopathy (CSM), is caused by arthritic changes (spondylosis) of the cervical spine, which result in narrowing of the spinal canal (spinal stenosis) ultimately causing compression of the spinal cord. In Asian populations, spinal cord compression often occurs due to a different, inflammatory process affecting the posterior longitudinal ligament. Clinical signs and symptoms depend on which spinal cord level (cervical, thoracic, or lumbar) is affected and the extent (anterior, posterior, or lateral) of the pathology, and may include: Upper motor neuron signs—weakness, spasticity, clumsiness, altered tonus, hyperreflexia and pathological reflexes, including Hoffmann's sign and inverted plantar reflex (positive Babinski sign). Lower motor neuron signs—weakness, clumsiness in the muscle group innervated at the level of spinal cord compromise, muscle atrophy, hyporeflexia, muscle hypotonicity or flaccidity, fasciculations. Sensory deficits. Bowel/bladder symptoms and sexual dysfunction

* Neuroblastoma is a type of cancer that forms in nerve cells called neuroblasts. Neuroblasts are immature nerve tissue. They normally turn into working nerve cells. But in neuroblastoma, they form a tumor. Neuroblastoma usually begins in the adrenal glands. You have two adrenal glands, one on top of each kidney. The adrenal glands make important hormones that help control heart rate, blood pressure, blood sugar, and the way the body reacts to stress. Neuroblastoma may also begin in the neck, chest or spinal cord. Neuroblastoma is caused by mutations (changes) in genes. In most caNeuroblastoma often begins in early childhood. Sometimes it begins before a child is born.The most common symptoms are caused by the tumor pressing on nearby tissues as it grows or by cancer spreading to the bone.They include: A lump in the abdomen, neck or chest, bulging eyes, dark circles around the eyes, bone pain, swollen stomach and trouble breathing in babies, painless, bluish lumps under the skin in babies, inability to move a body part (paralysis)ses, the cause of the mutation is unknown. In some other cases, the mutation is passed from the parent to the child.

* Neuroretinoangiomatosis or Sturge-Weber syndrome is a condition that affects the development of certain blood vessels, causing abnormalities in the brain, skin, and eyes from birth. Sturge-Weber syndrome has three major features: a red or pink birthmark called a port-wine birthmark, a brain abnormality called a leptomeningeal angioma, and increased pressure in the eye (glaucoma). These features can vary in severity and not all individuals with Sturge-Weber syndrome have all three features. Most people with

Sturge-Weber syndrome are born with a port-wine birthmark. This type of birthmark is caused by enlargement (dilatation) of small blood vessels (capillaries) near the surface of the skin. Port-wine birthmarks are typically initially flat and can vary in color from pale pink to deep purple. In people with Sturge-Weber syndrome, the port-wine birthmark is most often on the face, typically on the forehead, temple, or eyelid. The port-wine birthmark is usually only on one side of the face but can be on both sides. Over time, the skin within the port-wine birthmark can darken and thicken. In Sturge-Weber syndrome, there is usually abnormal formation and growth of blood vessels within the two thin layers of tissue that cover the brain and spinal cord. This abnormality, which is called leptomeningeal angioma, can affect one or both sides of the brain and impair blood flow in the brain and lead to loss of brain tissue (atrophy) and deposits of calcium (calcification) in the brain below the angioma. The decrease in blood flow caused by leptomeningeal angiomas can cause stroke-like episodes in people with Sturge-Weber syndrome. These episodes often involve temporary muscle weakness on one side of the body (hemiparesis), vision abnormalities, seizures, and migraine headaches. In affected individuals, these episodes usually begin by age 2. The seizures usually involve only one side of the brain (focal seizures), during which the port-wine birthmark may darken and individuals may lose consciousness. People with Sturge-Weber syndrome have varying levels of cognitive function, from normal intelligence to intellectual disability. Some individuals have learning disabilities with problems focusing similar to attention-deficit/hyperactivity disorder (ADHD).

* Ochoa syndrome is a disorder characterized by urinary problems and unusual facial expressions. The urinary problems associated with Ochoa syndrome typically become apparent in early childhood or adolescence. People with this disorder may have difficulty controlling the flow of urine (incontinence), which can lead to bedwetting. Individuals with Ochoa syndrome may be unable to completely empty the bladder, often resulting in vesicoureteral reflux, a condition in which urine backs up into the ducts that normally carry it from each kidney to the bladder (the ureters). Urine may also accumulate in the kidneys (hydronephrosis). Vesicoureteral reflux and hydronephrosis can lead to frequent infections of the urinary tract and kidney inflammation (pyelonephritis), causing damage that may eventually result in kidney failure. Individuals with Ochoa syndrome also exhibit a characteristic frown-like facial grimace when they try to smile or laugh, often described as inversion of facial expression. While this feature may appear earlier than the urinary tract symptoms, perhaps as early as an infant begins to smile, it is often not brought to medical attention. Approximately two-thirds of individuals with Ochoa syndrome also experience problems with bowel function, such as constipation, loss of bowel control, or muscle spasms of the anus. Ochoa syndrome is an autosomal recessive congenital disorder.

* Postcommissurotomy Syndrome or postpericardiotomy syndrome is described in 10 to 40 per cent of patients following commissurotomy for acquired valvular stenosis, and in 30 per cent of 100 consecutive survivors following open heart surgery for repair of atrial and ventricular septal defects and the relief of pulmonic and aortic stenosis. The clinical picture is one of recurrent fever and retrosternal pain described as dull or, more commonly, knifelike or stabbing, and in most patients a pericardial friction rub. The

electrocardiogram often suggests pericardial changes that may disappear during periods of remission. They may also persist for weeks following resolution of the syndrome. The cardiac silhouette on x-ray examination is generally enlarged. The postpericardiotomy syndrome is a benign illness with an excellent prognosis.

* Prune belly syndrome is a group of rare birth defects that involves these three main problems: Poor development of the abdominal muscles, causing the skin of the belly area to wrinkle like a prune, undescended testicles, urinary tract problems. The exact causes of prune belly syndrome are unknown. The condition affects mostly boys. While in the womb, the developing baby's abdomen swells with fluid. Often, the cause is a problem in the urinary tract. The fluid disappears after birth, leading to a wrinkled abdomen that looks like a prune. This appearance is more noticeable due to the lack of abdominal muscles. Weak abdominal muscles can cause: Constipation, delay in sitting and walking, difficulties coughing, urinary tract problems can cause difficulty urinating.

* Q fever is an infectious disease caused by bacteria that is spread by domestic and wild animals and ticks. Q fever is caused by the bacteria Coxiella burnetii, which live in domestic animals such as cattle, sheep, goats, birds, and cats. Some wild animals and ticks also carry these bacteria. You can get Q fever by drinking raw (unpasteurized) milk, or after breathing in dust or droplets in the air that are contaminated with infected animal feces, blood, or birth products. People at risk for infection include slaughterhouse workers, veterinarians, researchers, food processors, and sheep and cattle workers. Men are infected more often than women. Most people who get Q fever are between 30 and 70 years old. In rare cases, the disease affects children, especially those who live on a farm. In infected children younger than 3 years old, Q fever is usually noticed while looking for the cause of pneumonia. Symptoms usually develop 2 to 3 weeks after coming in contact with the bacteria. This time is called the incubation period. Most people have no symptoms. Others may have moderate symptoms similar to the flu. If symptoms occur, they may last for several weeks. Common symptoms may include: Dry cough (nonproductive), fever, headache, joint pain (arthralgia), muscle pains, Other symptoms that may develop include: Abdominal pain, chest pain, jaundice (yellowing of the skin and whites of the eyes), rash.

* Quadrantanopsia refers to an anopia affecting a quarter of the field of vision. It can be associated with a lesion of an optic radiation. While quadrantanopia can be caused by lesions in the temporal and parietal lobes, it is most commonly associated with lesions in the occipital lobe. An interesting aspect of quadrantanopia is that there exists a distinct and sharp border between the intact and damaged visual fields, due to an anatomical separation of the quadrants of the visual field. For example, information in the left half of visual field is processed in the right occipital lobe and information in the right half of the visual field is processed in the left occipital lobe. In a quadrantanopia that is partial, there also exists a distinct and sharp border between the intact and damaged field within the quadrant. The sufferer is able to detect light within the damaged visual field. Homonymous inferior quadrantanopia is a loss of vision in the same lower quadrant of visual field in both eyes whereas a homonymous superior quadrantanopia is a loss of vision in the same upper quadrant of visual field in both

eyes. Binasal (either inferior or superior) quadrantanopia affects either the upper or lower inner visual quadrants closer to the nasal cavity in both eyes. Bitemporal (either inferior or superior) quadrantanopia affects either the upper or lower outer visual quadrants in both eyes.

1.2 NCFL, CALF, OTHER

-NCFL (Non-Consolidated Frequency List) ia decentralized repository which aggregates unverified/experimental frequency claims.The list offers unfiltered submissions (anecdotal, experimental, or theoretical entries) without quality control. Useful for hypothesis generation, not clinical application. Good to o crowdsource experimental ideas (but verify elsewhere!).

-CALF (Consolidated Annotated Frequency List) is a research-oriented database with metadata (e.g., source studies, clinical outcomes). Contains frequencies + contextual annotations (e.g., "10.5 Hz, used in 2017 UCLA study on migraine relief"). It may include contradictory results or confidence scores. An use case is for researchers validating or debunking frequency claims ie. to check if a frequency has credible science behind it.

ETDFL and CALF aim for reproducibility; NCFL embraces speculation.

- The Brainwave/Cymatic Frequency Listing is a cross-disciplinary reference linking brainwave states to observable cymatic geometries and therapeutic applications.

Cymatic Resonance Principles,
* Harmonic Alignment: When brainwave frequencies match a material's natural resonance (e.g., 7.83 Hz Schumann resonance), cymatic patterns may synchronize with neural activity.
* Matter-Brain Coupling: Example: 528 Hz ("DNA repair" frequency) generates hexagonal water clusters (Masaru Emoto-style experiments) while potentially enhancing theta brainwaves.

Experimental Applications,
* Neuro-Cymatic Therapy: Use 10 Hz alpha waves + 10 Hz sine tones to create stable cymatic patterns in water-based tissues (lymph, CSF). Target: Chronic inflammation (hypothesized pattern stabilization effect).
* Meditation Tech: Binaural beats at 7.83 Hz (Earth resonance) paired with cymatic visuals to deepen trance states.

Caveats & Research Gaps
* Cymatics ≠ Direct Brain Effects: Patterns observed in sand/water may not directly translate to biological systems.
* Individual Variability: Brainwave responses to frequencies vary by neurochemistry (e.g., GABAergic vs. glutamatergic dominance).

Uses of the Listing
* Therapeutic Design: Pair brainwave frequencies with matching cymatic tones (e.g., theta waves + 5.8 Hz for glymphatic activation).
* Research Validation: Cross-reference with CALF (for annotated studies) or ETDFL (for device presets).
* Avoid NCFL Pitfalls: Unverified claims (e.g., "174 Hz dissolves kidney stones") require cymatic/biofeedback validation.

1.2.1 Rife Frequencies

Resonant Therapy Sessions-Rife Frequencies

Resonant Therapy Sessions-Rife Frequencies
https://archive.org/details/Resonant_Therapy_Sessions-Rife_Frequencies

Absent Mindedness; Accelerate Learning; Activity Increase; Adenoids Nose; Adynamia Geriatric; Agitation; Alertness Increase; Anima Soul; Atrophy Muscular Peroneal; Aura Energy; Beauty Skin; Blood Sluggish Clean And Capillaries; Breathe Easier; Calming1; Contractions Arrests Discharges; Control Of Events; Coordination Difficulties; Creativity; Distended Organs; Distended Stomach; Dreams; Emotion Abnormal Behaviour; Energy Vitality; Environmental Balancing; Exhaustion; Eye Discharge; Feel Good Overall; Feet Excessive Sweating; Flatulence; Fluid In Joints And Tissues; Foot Blisters; Functional Disturbances; Grounding; Heat Stress Disorders; Hip Joint Pain; Household Insect Mix; Imagination; Independence; Infection Any; Irritability And Whining; Jet Lag; Kundalini Expand; Lymph Stasis; Memory Reading Spelling-Improve; Mental Contact; Mycosis Fungoides; Originality; Paresis Muscle; Paresthesia; Relaxation To Produce; Ringworm Microsporum Canis; Sacroiliac Joint Dysfunction; Self Healing; Self-Assembly Of Body; Situations Undo; Sleep Restorative; Sleep Sound; Sleep To Induce; Stiff Neck; Stomach Gas

Resonant Therapy Sessions-Rife Frequencies 02
https://archive.org/details/Resonant_Therapy_Sessions-Rife_Frequencies_02

Alignment Of Individual; Alzheimer Disease; Amnesia Brain; Amyloidosis; Apoplexy; Appetite Lack Of; Astral Projection; Astral Travel; Auto Intoxication; Balancing Of Body; Bunions; Concentration Improve; Contusion Bruise; Crick In The Neck; Cyst Sebaceous; Dandruff Scales; Deafness1; Dental Ulcers; Dizziness; Emotions General Aid; Energy Vitality1; Energy Vitality2; Fecal Incontinence; Felis Cats; Gait Disorders Neurologic; General Cleanser; Headaches Unknown Cause; Healing Special; Hemorrhoids Piles; Hiccups; Histerical Symptoms; Hoarseness; Huntington Disease; Hyperacidity Solar Plexus; Hyperacidity Stomach2; Idiopathic Parkinson Disease; Infection Diabetic; Insomnia; Intellectual Ability; Intermittent Claudication Muscle; Intuition Awakening; Involuntary Muscles; Knee Injury; Knee Joint Pain; Lentigo;

Ligaments Stimulate Healing; Locomotor Ataxia Muscle Failure; Locomotor Convulsions; Lung General Tonic; Luxation Joints; Memory-Test Taking Improve; Numbness; Skin Collagen Building; Spastic Paresis; Stability; Sunstroke; Surgery Anaesthesia Detox; Surgical Pain Postop; Tendomyopathy Tendon; Vision Acuity

1.2.2 RTS-Muscles

https://archive.org/details/Resonant_Therapy_Sessions-Muscles

These recordings present the muscle frequencies in groups. The frequency data is from the Non-Consolidated Frequency List, though, reduced by scalar octaves to match normal wakefulness in the Beta range.

Anterior Neck, Face, Foot, Forearm, Good Dreams Sleep, Hand, Iliac Region-Buttocks-Pelvis, Leg, Posterior Neck, Shoulder-Arm, Spine, Thigh, Thorax-Chest-Abdomen,

* Good dreams sleep, recordings based upon digipressure practice, where stimulation of the area between the soles and heels is to bring a good -satisfactory in quality, quantity, or degree dreams sleep. The muscles' frequencies have been reduced to the Delta range for sleep facilitation and lucid dreaming. The Delta range is dominant in infants under 1 year old. There are three versions in the keys of the three Major Chakras.

1.2.3 Wellness and Balance

https://archive.org/details/Wellness_And_Balance

She-Wellness is a 76 minutes mix of music and sound frequencies
designed for women,

01 - Normalize Adrenal Function 1335Hz - 8m
02 - Normalize Pituitary Function 635Hz - 8m
03 - Normalize Testosterone female 1445Hz - 8m
04 - Stimulate Increased HGH Pituitary 645Hz - 8m
05 - Stimulate Normal Pineal Function 662Hz - 5m
06 - Normalize Endocrine System Function 537Hz - 8m
07 - Stimulate / Normalize Immune System Function 835Hz- 5m
08 - Stimulate Normal Pancreas Function 654Hz - 8m
09 - Stimulate the Normalization of Calcium Metabolism 328Hz - 8m
10 - Reduce Chemical Sensitivity 440 Hz - 5m

11 - Stimulate the Balancing Of Spiritual Well-Being 1565Hz -5m

He-Wellness is a 79 minutes mix of music and sound frequencies designed for men,

01 - Normalize Adrenal Function 1335Hz - 8m
02 - Normalize Pituitary Function 635Hz - 8m
03 - Normalize Testosterone male 1444Hz - 8m
04 - Stimulate Increased HGH Pituitary 645Hz - 8m
05 - Stimulate Normal Pineal Function 662Hz - 5m
06 - Normalize Endocrine System Function 537Hz - 8m
07 - Stimulate / Normalize Immune System Function 835Hz- 5m
08 - Stimulate Normal Pancreas Function 654Hz - 8m
09 - Stimulate Normal Thyroid Function 763Hz - 8m
10 - Stimulate the Normalization of Calcium Metabolism 328Hz - 8m
11 - Reduce Chemical Sensitivity 440Hz - 5m

1.2.4 Human Chemistry Elements

https://archive.org/details/Human_Chemistry_Elements

Antimony, Boron, Calcium, Carbon, Chlorine, Chromium, Cobalt, Copper, Germanium, Gold, Hydrogen, Iodine, Iron, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nitrogen, Oxygen, Phosphorus, Platinum, Potassium, Rhodium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Tin, Zinc,

* Antimony to regulate energetic communication between spirit and Higher Self. Assists to overcome negative attitudes and manifesting higher spiritual qualities. Facilitates drawing on past-life knowledge.

* Boron for bone health and strength, prevention of calcium and magnesium loss, mental function, increase levels of serum estrogen and ionized calcium.

* Calcium aids in maintaining bone health and dental health, as well as the prevention of colon cancer and the reduction of obesity.

* Carbon, homeopathic remedy for fainting and collapse, perpheral vascular disease, emphysema, fatigue, gas or bloating, and varicose veins.

* Chlorine, for the distribution of carbon dioxide and the maintenance of osmotic pressure in the tissues. It is necessary for the manufacture of glandular hormone secretions. It prevents the building of excessive fat and autointoxication.

* Chromium, involved in glucose metabolism, is used to promote fat loss and increase lean muscle tissue.

* Cobalt, myelin sheat repair, vitamin B-12 metabolism, increases energy, iron assimilation, enzyme stimulation.

* Copper to balance inner conflicts. Strengthens intuition and the connection with ones sense of higher powers. Refines radiation and supports detoxification on all levels of body, mind and spirit.

* Germanium, anti-oxidant, stimulates interferon production (anti-cancer), degenerative diseases.

* Gold for vitality, life force, lightening emotions/spirit, and heightening mental powers. First mined by extraterrestrial civilizations.

* Hydrogen, antioxidant, anti-aging, cellular hydration, energy production.

* Iodine helps clear 6th and 5th chakra blocks.

* Iron supports vitality and life energy. Good for energy imbalance and disturbance.

* Lithium for self-clearing and self-cleansing.

* Magnesium, helps keep blood pressure normal, bones strong, and the heart rhythm steady.

* Manganese, helps protect bones, guard against heart disease and other degenerative disease. It is also used to treat diabetes and ear infections. Manganese is antioxidant, and plays an important role in creating the framework on which bones are built.

* Mercury, in the ORMUS process this results from gold and the other way around. In homeopathy used for ear infections, sinusitis, memory loss, abscesses, boils and mumps.

* Molybdenum, aids in carbohydrate, sulfur, and fat metabolism. Detox from cancer causing chemicals, and helps with tooth decay. Promotes normal cell function and helps carry the excess nitrogen out of the body.

* Nitrogen for muscle tonic, normalized hormone levels and immune system.

* Oxygen, anti-oxidant, energy booster, improved mental function.

* Phosphorus helps healthy bone formation, improve digestion, regulate excretion, protein formation, hormonal balance, improve energy extraction, cellular repair, optimize

chemical reactions, and proper nutrient utilization.

* Platinum to dissolve rigidity of emotions and spirit. Strengthens too, the energetic connection between body, mind and spirit.

* Potassium, helps prevent kidney problems, lower risk of cancer, protect against stroke, prevent against heart disease, and lower blood pressure. Potassium plays an important part in conducting electrical impulses within the body, it's also essential in maintaining the body’s normal fluid and chemical balances. Important for the proper working of muscle cells, including those in the heart. It also plays a role in the transmission of nerve impulses and helps release energy from the carbohydrates, proteins, and fats that are consumed in the diet.

* Rhodium for thymus regeneration.

* Selenium, anti-oxidant, enables thyroid hormone production, boosts immune system, good for mental health and cell replication.

* Silicon is basis for other life forms in the universe, aids in bone and tissue formation and growth and development. Silicon helps the body burn fats and carbohydrates.

* Silver for charisma, sexual attraction, receptivity, refining feeling and stimulating dreaming.

* Sodium, helps to regulate water, to balance acids in the blood and urine, and to promote the absorption of nutrients across cell membranes. It is also plays a role in muscle contractions and proper functioning of the nervous system. Sodium contributes to the alkalinity of the blood. It will also correct stomach ulcers, dissolve deposits in the joints, ears and gallbladder, and is good for
arthritis.

* Strontium, inhibits bone re-absorption while stimulating bone growth -increased bone mineral density, useful in osteoporosis, post-menopausal osteoporosis, cartilage metabolism, and dental caries.

* Sulfur deepens insight and realization, assists in mental and spiritual awakening and flexibility. Relieves blockages and dissolves hardening of all kinds.

* Tin supports a sense of justice and ones natural authority. Increases creativity, power of speech, self-realization and ability to make contacts.

* Zinc helps harmonize body, mind, spirit. Supports the ability to be self-aware. Helps with over-activity, excessive energy, and emotional/mental tension which may result through shock and trauma.

A number before the symbol refers to the atomic number.

Antimony 121Sb - 51Hz, 23.93Hz, 509.40Hz, 549.14Hz
Boron 10B - 5Hz, 10.746Hz, 228.75Hz, 246.60Hz
Boron 11B - 5Hz, 32.084Hz, 682.97Hz, 736.26Hz
Calcium Ca - 20Hz, 6.728Hz, 143.22Hz, 154.39Hz
Carbon C - 6Hz, 25.144Hz, 535.24Hz, 577.00Hz
Chlorine 35Cl - 17Hz, 9.798Hz, 208.57Hz, 224.84Hz
Chlorine 37Cl - 17Hz, 8.156Hz, 173.62Hz, 187.16Hz
Chromium Cr - 24Hz, 5.652Hz, 120.31Hz, 129.70Hz
Cobalt Co - 27Hz, 23.614Hz, 502.67Hz, 541.89Hz
Copper 63Cu - 29Hz, 26.505Hz, 564.21Hz, 608.23Hz
Germanium Ge - 32Hz, 3.488Hz, 74.25Hz, 80.04Hz
Gold Au - 47Hz, 1.712Hz, 36.44Hz, 39.29Hz
Hydrogen 1H - 1Hz, 100.0002Hz, 128.702Hz, 294.79Hz
Hydrogen 2H - 1Hz, 15.351Hz, 326.78Hz, 352.27Hz
Hydrogen 3H - 1Hz, 106.6632Hz, 270.542Hz, 447.69Hz
Iodine I - 53Hz, 20.007Hz, 425.89Hz, 459.12Hz
Iron Fe - 26Hz, 3.231Hz, 68.78Hz, 74.14Hz
Lithium 6Li - 3Hz, 14.716Hz, 313.26Hz, 337.70Hz
Magnesium Mg - 12Hz, 6.1195Hz, 130.27Hz, 140.43Hz
Manganese Mn - 25Hz, 24.664Hz, 525.02Hz, 565.99Hz
Mercury 199Hg - 80Hz, 17.827Hz, 379.48Hz, 409.09Hz
Molybdenum 95Mo - 42Hz, 6.514Hz, 138.66Hz, 149.48Hz
Molybdenum 97Mo - 42Hz, 6.652Hz, 141.60Hz, 152.65Hz
Nitrogen 14N - 7Hz, 7.224Hz, 153.78Hz, 165.78Hz
Oxygen O - 8Hz, 13.557Hz, 288.59Hz, 311.10Hz
Platinum Pt - 78Hz, 21.499Hz, 457.65Hz, 493.36Hz
Phosphorous P - 15Hz, 40.481Hz, 861.72Hz, 928.95Hz
Potassium 39Ka - 19Hz, 4.667Hz, 99.35Hz, 107.10Hz
Rhodium Rh - 45Hz, 3.172Hz, 67.52Hz, 72.79Hz
Selenium Se - 34Hz, 19.092Hz, 406.41Hz, 438.12Hz
Silicon Si - 14Hz, 19.865Hz, 422.87Hz, 455.86Hz
Silver 107Ag - 79Hz, 4.046Hz, 86.13Hz, 92.85Hz
Sodium Na - 11Hz, 26.451Hz, 563.06Hz, 606.99Hz
Strontium Sr - 38Hz, 4.333Hz, 92.24Hz, 99.43Hz
Sulfur Si - 16Hz, 7.67Hz, 163.27Hz, 176.01Hz
Tin 115Sn - 50Hz, 32.699Hz, 696.06Hz, 750.37Hz
Zinc Zn - 30Hz, 6.254Hz, 133.13Hz, 143.52Hz

1.2.5 Health Related

https://archive.org/details/Dietary_Minerals

- Selenium : prevents aging; heart function; immunity; prostaglandin and glutathione peroxidase production; tissue elasticity; regulates thyroid; anticancer.

- Potassium : Fluid balance with sodium; growth; muscle contraction and heart beating; alkalinity maintenance; kidney function; cell metabolism; enzyme reactions; muscle protein synthesis from amino acids; neuron function.

- Calcium : Bones and teeth; regulates heartbeat; oxygen entry into cell; blood clotting; prevents heavy metal buildup; muscle and nerve function; enzyme action.

- Molybdenum : Aids burning of fats and aldehydes; mobilizes iron from liver; uric acid formation; sulfur metabolism; DNA/RNA metabolism; prevents cancer.

- Chromium : Metabolism of glucose (with insulin); synthesis of fatty acids and cholesterol.

- Manganese : Protein; carbohydrate and fat metabolism; skeleton and cartilage development; sex hormones; nerve & brain nourishment; enzyme activator; histamine release; coordination between brain, nerves and muscles.

- Iron : Red blood cells; white blood cells (lymphocytes and neutrophils); immunity; prevents anemia; protein metabolism; cellular metabolism and respiration.

- Iodine : Thyroid function - production of thyroxin; helps oxygen enter the cell, helps absorption of Vitamin A, lactation, neutrophil action.

- Copper: production of red blood cells; bone formation; RNA production; enzymes; resistance to infection; production of catalase and phosphoric lipids.

- Phosphorus : Appetite; memory; growth of bones; nails; hair; utilization of carbohydrates, fats, proteins; maintenance of cells; kidney function; nerves, enzymes.

- Zinc : Immunity; aids enzymes in digestion; vitamin absorption, especially C; insulin production; appetite; night vision; taste and smell; potency; prostate gland functioning; histamines; prevents cancer.

(The Owners Manual For The Human Body by Dr. Saul Pressman, DCh)

Selenium - 272 Hz
Potassium - 304 Hz
Calcium - 320 Hz
Molybdenum - 336 Hz
Chromium- 384 Hz
Manganese - 400 Hz
Iron - 416 Hz
Iodine - 424 Hz

Copper - 464 Hz
Phosphorus - 480 Hz
Zinc - 480 Hz

The last file includes all the minerals.

https://archive.org/details/HAP_Emergency_Kit

The files in the emergency kit provide alternative digital remedies to some common problems.

- general antiseptic
- bone spurs
- facial toner
- general fluid retention
- hemorrhoids
- general inflammation
- poor eyesight
- sinus
- vitamins

https://archive.org/details/HAP_Nogier_Body_Health

Nogier's set of frequencies as used in light therapy and ear acupuncture..

1. (Frequency F, 73 Hz) Face, mouth, brain frequency, psychic/psychosomatic symptoms
2. (Frequency G, 147 Hz) Frontal brain, intellectual disorder, anxiety, muscle strain
3. (Frequency A, 294 Hz) Body openings, tonification, acute diseases, inflammation
4. (Frequency B, 587 Hz) Abdomen, sedation, chronic diseases, metabolism
5. (Frequency C, 1174 Hz) Muscles, bones, joints, circulation, movement disorders
6. (Frequency D, 2349 Hz) Commissural, brain frequencies, stress balance, relaxation
7. (Frequency E, 4698 Hz) Nerves, pain, neuralgia, herpes zoster, spinal cord

https://archive.org/details/HAP_Whole_Body

A relaxing massage-like experience of the whole body. These mp3's recreate individual binaural frequencies associated to the specific organ. The file with all the frequencies plays in order from coccyx to cortex.

2.06 Hz coccyx
2.30 Hz genitals
2.57 Hz bladder
2.67 Hz intestines
3.07 Hz hara below navel, balance of pelvis
3.44 Hz ovaries vitality, life at every level
3.84 Hz liver, pancreas
4.11 Hz kidneys strength
4.60 Hz spleen, blood emotional impulse
5.14 Hz stomach emotional acceptance
5.35 Hz lungs oxygen, heat
6.15 Hz heart love, warmth
6.40 Hz top of head spirit, liberation, transcendence
6.88 Hz collarbones vitality, overall balance, stability
7.69 Hz shoulders strength of the arms, expansion, teaching
8.22 Hz mouth speech, creativity
9.19 Hz upper lip emotions, conflict resolution
10.3 Hz nasal passages breathing, taste
10.7 Hz ears hearing, formal concepts
12.0 Hz eyes visualization
13.8 Hz frontal lobes the seventh sense, final decision
15.4 Hz cortex intelligence

Source: lullianarts.net/body.htm

1.2.6 Anti-Aging

https://archive.org/details/Biological_Anti-Aging

The sound frequencies used in these sessions are based upon sets for resonant therapy devices.

Fountain of Youth Laser Water: 2, 4, 7, 9, 10, 12, 20, 21, 24, 25, 27, 28, 33, 36, 38, 42, 43, 44, 45, 46, 47, 49, 52, 54, 55, 59, 60, 61, 66, 73, 78, 81, 82, 83, 93, 96, 97, 100, 141, 212, 234, 341, 343, 363, and 645 Hz.

1.2.7 Vitamin C Gene

https://archive.org/details/DNA_Activation_of_Vitamin_C_Gene

DNA Activation of Vitamin C Gene

Vitamin C is naturally produced in animals. Their bodies can make it either from liver or kidneys whereas humans, presently, can barely produce a few milligrams. When the gene in charge of deterioration, prevention and fighting disease is switched off, it hampers seriously body's life quality and duration. These recordings aim to tweak the gene in the DNA responsible of vitamin's C generation.

10126 Hz ---- DNA preparation for change
528 Hz -------- DNA repair
417 Hz -------- Facilitating change
7 Hz ---------- DNA teleportation
2850.24 Hz - Vitamin C gene (L-gulonolactone oxidase)
10 Hz ---------- DNA balance during change
7 Hz ---------- DNA teleportation
528 Hz -------- DNA repair
10126 Hz --- End of DNA change

1.2.8 RTS-Miscellaneous

https://archive.org/details/Resonant_Therapy_Sessions-Miscellaneous

Agar-Agar, Astaxanthin, Brain Stimulation, Breathing Deep, Calcium Plus Magnesium, Calea Ternifolia, Copper (63, 65) Plus Zinc, Dimethyltryptamine Stimulation, Drug Detox, Electrolyte Levels, Emotional Rigidity, Facial Toning, Fat Metabolism, Happiness, Human Growth Hormone HGH Production, Hydroxyl Radical HO, Intelligence Enhancement, Interleukin Production, Iron Plus Molybdenum (95, 97), Limit Alcohol Craving, Limit Caffeine Craving, Limit Cocaine Craving, Limit Methamphetamine Craving, Limit Smoking Craving, Lucid Dreams, Manganese Plus Calcium, Nitrogen (14, 15) Plus Oxygen NO (Nitric Oxide), Normalize Hormone Levels, Pantothenic Acid-Vitamin B5, Potassium Bicarbonate KCHO3, Potassium Plus Iodine NaI (Potassium Iodide), Regeneration And Healing, Rubidium87 Plus Chlorine37 RbCl (Rubidium Chloride), Salvia Divinorum, Schumann Resonance, Skin Enhancement, Sodium Bicarbonate NaCHO3, Sodium Chloride (35,37) Plus Water NaCl+H2O, Sodium Plus Iodine KI (Sodium Iodide), Super Hydrated Water H2O+Iron Oxide FeO+Crystal Resonator, Tomatis Ear Sensitization, Vitamag Set, Walking Awareness And Control

* Agar-agar, for constipation, diabetes, weight loss, joint/back pain and obesity.

* Astaxanthin is a lipid-soluble antioxidant able to cross the blood barrier. Used for inflammation relief, athletic endurance, brain and eye health, skin health, immune system modulation and cardiovascular support.

* Brain stimulation, features selected frequencies in the Beta, Alpha, Theta, and Delta ranges.

* Calcium+Magnesium, for heart, bone, oral and respiratory health. It also helps regulate bodily functions, pain relief, well-being and to ward off disease.

* Calea ternifolia, a psychotropic, low-toxic, oneirogenic or dream potentiator plant. Traditionally used for gastrointestinal disorders asthma and dysentery. It is cholagogue, cathartic and febrifugue. The plant increases salivation and produces a light hypnosis state with a decrease of both slow-wave sleep and REM periods. Enhances the number and recollection of dreams during sleeping periods and facilitates episodes of lively hypnagogic imagery during SWS stage I of sleep. Used in rituals to induce divination dreams regarding the choice question such as the location of a person or the cause of an illness. Each frequency plays for 2m, the sequence in playing order is, Third Eye Chakra body and energy tuner, Neurolenin B, Calein B, Calein A, 9alpha-Acetoxyzexbrevin, 9alpha-Hydroxy-11,13Dihydro11alpha,13-Epoxyatripliciolide-8beta-O-[2-Methylacrylate], Budlein A, Zexbrevin B, Ciliarin, Calaxin, O-Methyl Acacetin, 5-Hydroxy-7,4'-Dimethoxy flavone and 5,7-Dihydroxy-4'-Ethoxyflavone, Acacetin, Budlein B, Caleochromene A.

* Copper (63,65)+Zinc, metabolism control and support, enzyme activation, helps cells produce energy, regulates metabolic gene activity, aids nerve communication, hormone regulation, and skin protection.

* Dimethyltryptamine (DMT) stimulation. Dimethyltryptamine is a low-toxicity alkaloid produced by the enzyme INMT during normal human metabolism. It is present at higher concentrations than usual at the moments of birth, death, and REM sleep. This consciousness-expanding substance is extracted from plants and used by some religions and shamanic groups for divinatory or healing purposes. Its subjective effects can range from short-lived, milder psychedelic states to powerful immersive experiences; these are often described as a total loss of connection to external reality and an experience of encountering indescribable spiritual/alien beings and realms. In playing order, Third Eye Chakra body and energy tuner (2m), INMT (4m), Dimethyltryptamine (10m).

* Improve electrolyte levels.

* Emotional rigidity, brain fog, depression and calming frequencies.

* Facial toning, facial muscle exercising.

* Fat metabolism, boosts the process that breaks down ingested fats.

* Happiness, in the key of the Crown Chakra, the spiritual an emotional center.

* Human growth hormone, spurs growth in children and adolescents. It also helps to regulate body composition, body fluids, muscle and bone growth, sugar and fat metabolism, and heart function.

* Hydroxyl radical, HO, for air pollution, contamination and sanitization.

* Intelligence enhancement, assorted frequencies from the cymatic list related to intelligence (984, 492, 315.8, 36 to 44 with center in 40, 15.4, and 11.5 to 14.5 with center in 13Hz.)

* Interleukin, stimulates white cell activity against infection.

* Iron+Molybdenum (95,97), for normal blood formation, normal energy production, normal function of the immune system, antioxidant effect, excessive menstruation, anemia, and teenager rapid growth.

* Limit cravings of cocaine, caffeine, methamphetamine, help to quit smoking and alcoholism.

* Lucid dreams, and memory improvement with combinations of galantamine, choline alfoscerate and choline, using the equivalent frequency to the molecular mass of each of these three natural chemicals.

* Manganese+Calcium, good for constipation, weak bones, and premenstrual syndrome.

* Nitrogen (14,15)+Oxygen, or Nitric Oxide (NO) a cellular signaling molecule involved in many physiological and pathological processes, it is also a vasodilator.

* Normalize hormone levels, frequencies to regulate production of progesterone, estrogen, and testosterone (both male and female.)

* Pantothenic acid-vitamin B5, used for acne, asthma, hair loss, allergies, stress and anxiety, and heart problems.

* Potassium bicarbonate, KCHO3, is an electrolyte, antacid, plant fertilizer, fungicide, baking powder. Helps regulate heartbeat, cell water content. Prevents kidney stones and osteoporosis. Used in the treatment of hypokalemia.

* Potassium+Iodine, or Potassium Iodide (KI) similar indications to Sodium Iodide (see below).

* Rubidium87+Chlorine37, or Rubidium Chloride (RbCl), antidepressant, stimulant for apathy and lack of energy.

* Salvia divinorum, a non-toxic psychoactive plant, kappa opioid and D2 dopamine receptors agonist. Useful for diarrhea, stomach upsets, colds, sore throat, chronic pain, headaches, migraines, insomnia, addictions, depression, Alzheimer's, and schizophrenia. An aid in traditional shamanic ceremonies to facilitate visions in either curing or divination contexts. Effects may include past memories, overlapping realities and synesthetic experiences. The recording reproduces the frequencies of the Salvinorins A to J according to molecular mass.

* Schumann resonances, a set of seven frequencies needed to stay healthy, attuned to Earth.

* Skin enhancement, collagen and elastin production plus skin and slow aging frequencies.

* Sodium bicarbonate NaCHO3, baking soda, regulates bloodstream's pH as a counterbalance to acid build up, which is critical to life. It affects the pH of cells and tissues, balances cell voltage, and increases CO2 which helps with oxygenation.

* Sodium chloride (35,37) plus water, NaCl+H2O, saline solution. Used to treat dehydration and for nasal irrigation.

* Sodium+Iodine, or Sodium Iodide (NaI) indicated for hyperthyroidism, iodine deficiency, inflammatory respiratory diseases, prevention of radiation poisoning, and some eye and fungal diseases.

* Super hydrated water, H2O (water) + Iron Oxide (FeO) + Crystal Resonator. Development based on the book Super Hydrate And Charge Your Cells -to Youth, Energy And Vitality by Brian David Andersen.

* Tomatis ear sensitization, tonifies the muscles of the middle ear in order to sensitize the listener to the missing frequencies.

* Vitamag set, vitamin B plus Magnesium and Zinc.

* Walking awareness and control, to improve body balance while in motion.

1.3 SYMBOLIC CHEMISTRY

Symbolic Chemistry or The Sound of Life’s Patterns

The implicit order of biological systems -from molecular quarks to herbal qì- is rendered

explicit as ordered vibration, bridging materiality and perception. A method to translate t he hidden order of nature -herbs, molecules, genes, and even entire biological pathways- into music. Here's how it works in broad strokes:

1. Nature's Blueprints
Every component of life has a unique "fingerprint":
- Herbs → Their active compounds' combined molecular weight.
- Genes/Proteins → Their structure or how they interact in networks.
- Pathways → The rhythm of how molecules pass signals.

2. From Science to Sound
These fingerprints are converted into musical frequencies (Hz), like tuning nature's "vibrational signature" to a note.
A dense molecule might become a deep hum, while a light, fast-acting gene regulator becomes a high chime.

3. Composing with Life
Individual notes are woven together:
- Harmonies = How herbs or genes work together.
- Rhythms = The pace of biological processes (e.g., cell cycles).
- Algorithms arrange these into music, reflecting the beauty of the original system.

Life's invisible patterns -whether chemical, genetic, or energetic- can be heard. This is music composed not by humans, but by the logic of nature itself. Imagine a plant's chemistry as a chord, a gene's activity as a melody, and a disease pathway as a song that's "out of tune." The energy of TCM herbs (qì) becomes resonance -like a gong's lingering vibration.

1.3.1 Molecules, Peptides, Factors

The sound frequencies in these recordings are derived from the physical and vibrational properties of biological compounds.

Each frequency corresponds to either the molar mass (molecular weight) or its equivale nt scalar octave, creating an acoustic representation of the substance.

This approach applies to a range of biomolecular structures, including peptides, genetic elements (DNA/RNA), enzymes, and other organic motifs -effectively translating their biochemical signatures into resonant sound.

1.3.1.1 RT-MB-Covid-19 Related

https://archive.org/details/RT-MB_Covid-19_Related

Arginase Inhibitors Mix, Camostat-K11777, Camostat, Coronavirus Infection, Covid-19, Covid-19 Mix, diABZI Sting Agonists, EpiVacCorona Vaccine, Gastroenteritis, Hydroxychloroquine-Azithromycin, Lufotrelvir, Molnupiravir, PF-07321332, Severe Acute Respiratory Syndrome, Viral Infectious Disease, Viral Pneumonia

* Arginase Inhibitors Mix. Arginine is an amino acid that has been shown in nonclinical studies to be essential in the life cycle of many viruses. Therefore, arginine depletion may be an effective therapeutic approach against SARS-CoV-2. In addition to the putative direct antiviral activity with regard to SARS-COV-2, arginine depletion may also attenuate the pulmonary inflammation seen in COVID-19. Severe cases of COVID-19 are characterized by a hyperinflammatory lung pathology and local tissue damage that contribute to poor patient outcome. Several arginine-metabolizing enzymes in clinical development may be a viable approach to induce a low arginine environment to treat COVID-19 and other viral diseases produced by the families Herpesviridae and Adenoviridae. In tumor biology and medicinal chemistry arginase exerts its immunosuppressive effect by depleting the amino acid arginine in the tumor microenvironment and preventing the immune system's cytotoxic T-cells and natural killer (NK) cells from proliferating and killing the tumor. Inhibition of arginase activity reverses this immunosuppressive block and restores T-cell function. Arginase contributes to atherosclerosis and microvascular endothelial dysfunction in obesity. Its impact is reduced by aging because of higher levels of vascular oxidative stress. Obesity is accompanied by accelerated microvascular remodeling, the extent of which is related to the amount of arginase in the vascular wall. Small-molecule arginase inhibitors are currently described as promising therapeutic agents for the treatment of variety of diseases, including diseases associated with pathogens, ulcerative colitis, inflammatory bowel disease, allergic asthma, cardiovascular diseases, immune disorders, and cancer. The recording plays simultaneously the sound frequencies of Arginase Inhibitor 1, CB-1158-analog, CB-1158 (dihydrochloride), and 2(S)-amino-6-boronohexanoic acid (ABH). WARNING: Do not play this in the vicinity of either cats or kittens.
(https://doi.org/10.1016/j.ijid.2020.10.100)

* Camostat-K11777. The transmembrane serine protease, TMPRSS2 is an important target in the treatment of seasonal influenza infections and contributes to prostate carcinogenesis and metastasis. TMPRSS2 inhibition is also used in the treatment of some forms of cancer and is effective against some viral infections, as well as inhibiting fibrosis in liver or kidney disease or pancreatitis. Recent research has found that Camostat inhibition of TMPRSS2 partially blocked infection by SARS-CoV and Human coronavirus NL63 in HeLa cells. Another in vitro study showed that Camostat reduces significantly the infection of Calu-3 lung cells by SARS-CoV-2, the virus responsible for COVID-19. Viral spread and pathogenesis of SARS-CoV is driven by serine rather than cysteine proteases and can be effectively prevented by Camostat. Camostat has been clinically used to treat chronic pancreatitis, and thus represents an exciting potential therapeutic for respiratory coronavirus infections. Camostat, or similar serine protease

inhibitors, might be an effective option for treatment of SARS and potentially MERS, while vinyl sulfone-based inhibitors are excellent lead candidates for Ebola virus therapeutics. Broad-Spectrum Antiviral K11777, a cysteine protease inhibitor, blocked infection when viral entry did not require activating serine proteases, as is the case with ebolavirus (EBOV). K11777 also fully inhibited coronavirus infection, but only when target cell lines lacking activating serine proteases were used. If cells expressed cell-surface serine proteases known to activate coronaviruses, both K11777 and a serine protease inhibitor, such as camostat were required for full inhibition.

* Camostat. The transmembrane serine protease, TMPRSS2 is an important target in the treatment of seasonal influenza infections and contributes to prostate carcinogenesis and metastasis. TMPRSS2 inhibition is also used in the treatment of some forms of cancer and is effective against some viral infections, as well as inhibiting fibrosis in liver or kidney disease or pancreatitis. Recent research has found that Camostat inhibition of TMPRSS2 partially blocked infection by SARS-CoV and Human coronavirus NL63 in HeLa cells. Another in vitro study showed that Camostat reduces significantly the infection of Calu-3 lung cells by SARS-CoV-2, the virus responsible for COVID-19. Viral spread and pathogenesis of SARS-CoV is driven by serine rather than cysteine proteases and can be effectively prevented by Camostat. Camostat has been clinically used to treat chronic pancreatitis, and thus represents an exciting potential therapeutic for respiratory coronavirus infections.

* Coronavirus Infection. Coronavirus infection symptoms depend on the type of coronavirus and how serious the infection is. If you have a mild to moderate upper-respiratory infection such as the common cold, your symptoms may include Runny nose Headache Cough Sore throat Fever Not feeling well overall Some coronaviruses can cause severe symptoms. The infections may turn into bronchitis and pneumonia, which cause symptoms such as Fever, which may be quite high if you have pneumonia Cough with mucus Shortness of breath Chest pain or tightness when you breathe and cough Severe infections are more common in people with heart or lung diseases, people with weakened immune systems, infants, and older adults. A recording based upon Malacards data on Genetic Superpathways (as of 3/27/2020). https://www.malacards.org/card/coronavirus_infection

* Covid-19. Malacards - https://www.malacards.org/card/covid_19 -genetic pathways data as of April 2021 translated into Hz.

TLR4 IL6 IL4 IL2RA IL1B IFNB1
NRP1 IL6 IL4 IL2RA IL1B EGFR
TMPRSS2 TLR4 NRP1 IL6 IL1B IFNB1
IL6 IL4 IL2RA IL1B IFNB1 IFNA2
TLR4 IL6 IL4 IL2RA IL1B EGFR
NRP1 IL6 IL4 IL2RA EGFR CCL2
TLR4 IL6 IL4 IL2RA IFNB1 IFNA2
TLR4 IL6 IL1B IFNB1 IFNA2 EGFR
IL6 IL4 IL2RA IL1B IFNA2 CXCL8

IL6 IL4 IL2RA IFNA2 EGFR CXCL8
IL6 IL1B IFNB1 IFNA2 CCL2
TLR4 IL6 IL1B IFNB1 IFNA2 F3

-TLR4 Toll Like Receptor 4 - 644.685 (Hz)
-IL6 Interleukin 6 - 434.409
-IL4 Interleukin 4 - 870.873
-IL2RA Interleukin 2 Receptor Subunit Alpha - 564.468
-IL1B Interleukin 1 Beta - 563.169
-IFNB1 Interferon Beta 1 - 408.327
-NRP1 Neuropilin 1 - 694.911
-EGFR Epidermal Growth Factor Receptor - 904.749
-TMPRSS2 Transmembrane Protease Serine 2 - 986.460
-IFNA2 Interferon Alpha 2 - 394.701
-CCL2 C-C Motif Chemokine Ligand 2 - 548.901
-CXCL8 C-X-C Motif Chemokine Ligand 8 - 552.537
-F3 Coagulation Factor III Tissue Factor - 605.661

644.685 434.409 870.873 564.468 563.169 408.327
694.911 434.409 870.873 564.468 563.169 904.749
986.460 644.685 694.911 434.409 563.169 408.327
434.409 870.873 564.468 563.169 408.327 394.701
644.685 434.409 870.873 564.468 563.169 904.749
694.911 434.409 870.873 564.468 904.749 548.901
644.685 434.409 870.873 564.468 408.327 394.701
644.685 434.409 563.169 408.327 394.701 904.749
434.409 870.873 564.468 563.169 394.701 552.537
434.409 870.873 564.468 394.701 904.749 552.537
434.409 563.169 408.327 394.701 548.901
644.685 434.409 563.169 408.327 394.701 605.661

* COVID-19 Mix

WARNING: Contains Disulfiram, do not play the mix if you -or someone else around have been drinking alcohol in the past 24h.
WARNING: Contains Arginase inhibitors, do not play the mix in the vicinity of either cats or kittens.
Each item plays for 5m.

R.- Ozonated Saline Solution
L.- Arginase Inhibitors

R.- Triazavirin, Camostat-K11777, Scutellarin
L.- Nitric Oxide-Heliox Saline, Baicalin

R.- Lapatinib, Dasatinib, Pazopanib, Sitravatinib

L.- Sildenafil, Famotidine, Fenofibrate

R.- Ubiquinone, Ezetimibe, Evolocumab
L.- Apilimod-Vacuolin-1, GC376

R.- Bamlanivimab, Etesevimab
L.- Remdesivir, Molnupiravir, DMSO, Favipiravir

R.- Niclosamide, Proxalutamide, Tocilizumab, Budesonide
L.- Lopinavir, Ritonavir

R.- Evans blue, Lumacaftor, Sodium Lifitegrast
L.- Ivermectin, Disulfiram, Azithromycin

R.- Casirivimab
L.- Imdevimab

R.- Hesperetin, Nicotinamide, Glycyrrhizin
L.- Vitamin B12, Vitamin A, Zinc, Magnesium

* diABZI Sting Agonists. The drug diABZI—which activates the body's innate immune response—was highly effective in preventing severe COVID-19 in mice that were infected with SARS-CoV-2. The findings suggest that diABZI could also treat other respiratory coronaviruses. The researchers found that diABZI potently inhibits SARS-CoV-2 infection of diverse strains, including variant of concern B.1.351, by stimulating interferon signaling. diABZI could be an effective treatment for SARS-CoV-2 that could prevent severe COVID-19 symptoms and the spread of infection. Additionally, since diABZI has been shown to inhibit human parainfluenza virus and rhinovirus replication in cultured cells, the STING agonist may be more broadly effective against other respiratory viruses.

* EpiVacCorona Vaccine is a peptide-based vaccine against COVID-19 developed by the VECTOR center of Virology. It consists of three chemically synthesized peptides (short fragments of a viral spike protein) that are conjugated to a large carrier protein. The vaccine is delivered via intramuscular route and aluminum hydroxide serves as an immunological adjuvant.

* Gastroenteritis. Gastroenteritis is a gastrointestinal system infectious disease that involves inflammation of the lining of the stomach and small and large intestines, which is caused by viruses, bacteria, or parasites. Chemicals and drugs also cause gastroenteritis. The symptoms include diarrhea, loss of appetite, nausea, vomiting, cramps, and discomfort in the abdomen. A recording based upon Malacards data on Genetic Superpathways (as of 3/28/2020).
https://www.malacards.org/card/gastroenteritis

* Hydroxychloroquine is used to treat systemic lupus erythematosus, rheumatic

disorders like rheumatoid arthritis, porphyria cutanea tarda, and Q fever, and certain types of malaria. It is considered the first line treatment for systemic lupus erythematosus. Certain types of malaria, resistant strains, and complicated cases require different or additional medication. Hydroxychloroquine is being studied as an experimental treatment for coronavirus disease 2019 (COVID-19). Azithromycin is an antibiotic used for the treatment of a number of bacterial infections. This includes middle ear infections, strep throat, pneumonia, traveler's diarrhea, and certain other intestinal infections. It can also be used for a number of sexually transmitted infections, including chlamydia and gonorrhea infections. Along with other medications, it may also be used for malaria. A new controlled clinical study conducted by doctors in France shows that a combo of Hydroxychloroquine and Azithromycin (Z-Pak) cures 100% of coronavirus patients within 6 days of treatment.

* Lufotrelvir (PF-07304814) is the phosphate prodrug of PF-00835231, an anticoronaviral agent. It has a role as a prodrug, an EC 3.4.22.69 (SARS coronavirus main proteinase) inhibitor and an anticoronaviral agent. The protease 3CLpro is a potential drug target for coronavirus infections due to its essential role in processing the polyproteins that are translated from the viral RNA. The X-ray structures of the unliganded SARS-CoV-2 protease 3CLpro and its complex with an α-ketoamide inhibitor provides a basis for design of α-ketoamide inhibitors for a treatment of SARS-CoV-2 infection. The intravenous administered prodrug PF-07304814 entered clinical trials in September 2020, and the orally-active follow-up drug PF-07321332 started recruiting patients in February 2021. Lufotrelvir (PF-07304814) is a potential novel treatment option for hospitalized patients. PF-07321332 is designed as a potential oral therapy that could be prescribed at the first sign of infection, without requiring that patients are hospitalized or in critical care. Together, the two have the potential to solve the treatment paradigm that complements vaccination in cases where disease still occurs.

* Molnupiravir (development codes MK-4482 and EIDD-2801) is an experimental antiviral drug which is orally active and was developed for the treatment of influenza. It is a prodrug of the synthetic nucleoside derivative N4-hydroxycytidine, and exerts its antiviral action through introduction of copying errors during viral RNA replication. On 1 October 2021, Merck stated that an independent advisory board that had been monitoring the COVID-19 clinical trial recommended that recruitment into the study be stopped early because of convincing evidence of the drug's benefits, reducing the risk of hospitalization or death by 48%. Merck announced plans to seek an EUA from the FDA, and to submit marketing applications to other global drug regulators. The company announced plans to license the drug to generic manufacturers, to accelerate its availability.

* Paxlovid or PF-07321332 is an inhibitor of SARS-CoV-2 main protease which is currently under clinical development for the treatment of COVID-19. It has a role as an EC 3.4.22.69 (SARS coronavirus main proteinase) inhibitor and an anticoronaviral agent. It is a nitrile, a member of pyrrolidin-2-ones, a secondary carboxamide, a pyrrolidinecarboxamide, a tertiary carboxamide, an organofluorine compound and an azabicyclohexane. The intravenous administered prodrug PF-07304814 entered clinical

trials in September 2020, and the orally-active follow-up drug PF-07321332 started recruiting patients in February 2021. PF-07321332 is designed as a potential oral therapy that could be prescribed at the first sign of infection, without requiring that patients are hospitalized or in critical care. At the same time, Lufotrelvir (PF-07304814) is a potential novel treatment option for hospitalized patients. Together, the two have the potential to solve the treatment paradigm that complements vaccination in cases where disease still occurs. Paxlovid is an antiviral drug which acts as an orally active 3CL protease inhibitor. It is a covalent inhibitor, binding directly to the catalytic cysteine (Cys145) residue of the enzyme. Paxlovid is in phase 3 trials for the treatment of COVID-19 in combination with ritonavir. In November 2021, Pfizer announced positive phase 2/3 results, including 89% reduction in hospitalizations when given within three days after symptom onset.

* Severe Acute Respiratory Syndrome. Severe Acute Respiratory Syndrome is a Coronavirus infection that results in infection located in respiratory tract, has material basis in SARS coronavirus (SARS-CoV), which is transmitted by droplet spread of respiratory secretions, transmitted by ingestion of contaminated food, or transmitted by fomites. The infection has symptom fever, has symptom headache, has symptom body aches, has symptom dry cough, and has symptom hypoxia. A recording based upon Malacards data on Genetic Superpathways (as of 3/27/2020). https://www.malacards.org/card/severe_acute_respiratory_syndrome

* Viral Infectious Disease. A viral disease (or viral infection, or infectious disease) occurs when an organism's body is invaded by pathogenic viruses, and infectious virus particles (virions) attach to and enter susceptible cells. A recording based upon Malacards data on Genetic Superpathways (as of 3/31/2020). https://www.malacards.org/card/viral_infectious_disease

* Viral Pneumonia. A pneumonia is described as an inflammatory illness of the lung commonly caused by viruses such as influenza virus, parainfluenza, adenovirus, rhinovirus, herpes simplex virus, respiratory syncytial virus, hantavirus, and cytomegalovirus. A recording based upon Malacards data on Genetic Superpathways (as of 3/27/2020). https://www.malacards.org/card/viral_pneumonia

1.3.1.2 RT-Genetic Chants

https://archive.org/details/Resonant_Therapy-Genetic_Chants

Genetic chants produced from protein sequences.

ADRA2B, APOE, BDNF, CCR5, COMT, CYP17A1, DRD4, EGR1, ELAC2, FOXP2, GRIN3A, IL21, IL2RG, KIBRA, MTM1, NPTN, PKNOX2, PTGDR2, RUNX1, TEP1

ADRA2B, recall of positive and negative events
APOE, Alzheimer disease
BDNF, memory persistence
CCR5, HIV, AIDS
COMT, cognition and emotion
CYP17A1, stress
DRD4, activity
EGR1, memory consolidation of auditory fear conditioning
ELAC2, prostate cancer
FOXP2, innate instinct
GRIN3A, memory formation
IL21, chronic inflammatory diseases
IL2RG, immune system
KIBRA, episodic memory performance
MTM1, muscle disorders
NPTN, intelligence
PKNOX2, addiction
PTGDR2, folliculitis
RUNX1, leukemia
TEP1, aging

1.3.1.3 Modidied Human Gene Orthologs

https://archive.org/details/Modified_Human_Gene_Orthologs

Bovine-MYH16 Factor; Chimp-KRT41 Factor; Chimp-MT1L Factor; Chimp-ZNF850 Factor; Horse-LATH Factor; Horse-NPPA Factor; Mouse-CEP89 Factor; Mouse-EMRA Factor; Mouse-GLI3 Factor; Mouse-GLRA4 Factor; Mouse-HAUS7 Factor; Mouse-MOXD2 Factor; Mouse-NAT8 NAT8B Factors; Mouse-PDE3B Factor; Mouse-S100A15A Factor; Mouse-TAP2 Factor; Mouse-TDH Factor; Mouse-TRPC2 Factor; Orangutan-CMAH-Factor; Orangutan-FMO2 Factor; Pig-MBL1 Factor; Potoroo-PHR Factor; Rat-GULO Factor; Rhesus Macaque-CASP12 Factor; Rhesus Macaque-Retrocyclins; Molecular Biology; Biotechnology; Bioengineering; Genetic Therapies; Alternative Medicine; Alternative Therapies; Resonant Therapy; Therapy; Healing Remedies; Vibrational Therapies; Healing Sound; Music-Sound Frequencies Mix; Public Domain; ok33

Human genome modications

These are modified genes from the original human and other animal genomes. While

the purpose of the modification is unclear for modern research, focused either in Evolutionism or Creationism, truth is stranger than fiction. Genomes were modified intentionally to serve the purpose of creating an inferior Human, compared to the model. A Human stripped from the sophisticated features of the original. Other animal genomes were also modified to keep them at similar physycal level than that of the intelligent guest.

These recordings here recreate the molecular mass of fully functional ortholog or homologous protein from other mammals. Actually, the first part of each title -the name of the animal is less important than calling into mind the target protein.

Just a few lost or modified features include,

-UV radiation-induced DNA and lesions repair
-Ascorbic acid -vitamin C- production
-Balanced gene expression
-Greater immunity support
-Increased oxidation mechanisms for many drugs and xenobiotics
-Improved regulation of heart muscle, vascular smooth muscle and platelet aggregation
-Better mitochondrial metabolism and ciliogenesis
-Efficient cardiovascular protection from overload by decreasing vascular smooth muscle tone
-Efficient sweating and skin biofilm management
-More support for completion of cytokinesis
-Olfactory pheromone detection -male and female distinction in social and sexual relationship
-Efficient kidney detox
-Glutathione metabolic process
-Copper homeostasis
-Synthesis of N-Glycolylneuraminic acid
-Optimal hair cover

* Bovine MYH16 factor. Myosin heavy chain proteins are important in muscle contraction, and if they are missing, the muscles will be smaller. In non-human primates, MYH16 is functional and the animals have powerful jaw muscles. In human, the MYH16 gene has a mutation that causes the protein not to function.

* Chimp KRT41 factor, ortholog to human KRTHAP1, a gene that helps develop keratin is inactive out of 10 functional type 1 Keratin gene, this can cause thinning of human body hair. Mammalian body hair is not merely an aesthetic characteristic; it protects the skin from wounds, bites, heat, cold, and UV radiation. Additionally, it can be used as a communication tool and as a camouflage. Baldness of human compared to related species may also be due to loss of functionality in KRTHAP1.

* Chimp MT1L factor belongs to the metallothioneins, among its related pathways are

Metal ion SLC transporters and Copper homeostasis. The human MT1L gene is characterised and shown to produce mRNA in at least four human tissues. However is a disabled gene unlikely to produce a metallothionein protein because it contains a termination codon at position 26, by analogy to other human MT1 genes.

* Chimp ZNF850 factor may be involved in transcriptional regulation -controlling the rate of gene transcription. The human version of the protein is truncated resulting in a loss or modification of the function.

* Horse LATH factor is a surfactant protein, found in the sweat of equine, which allows sweat to penetrate the waterproof coat and there evaporate and cool the animal. Latherin may assist in breaking up microbial biofilms and help limit the buildup of such biofilms on various surfaces. Latherin is similar to other proteins which can be found in the lungs and other areas of the human body. Latherin belongs to an intriguing group of natural surfactant proteins that are bio-compatible unlike current commercially available detergents.

* Horse NPPA factor codes for a precursor of atrial natriuretic peptide (ANP) that protects the cardiovascular system from the volume and pressure overload by decreasing vascular smooth muscle tone.

* Mouse CEP89 Factor or FLJ14640 is required for ciliogenesis. Also plays a role in mitochondrial metabolism where it may modulate complex IV activity. This gene is known or predicted to be polymorphic in human. In these cases, the stop codon alleles are more prevalent than the ancestral allele.

* Mouse EMR4 factor. Translation of human EMR4 would result in a truncated 232-amino acid protein lacking the entire seven-span transmembrane region. This deletion relates to immunity and is not present in nonhuman primates, including chimpanzees. EMR4 is thought to play a role in leukocyte adhesion and migration. In other vertebrates, including nonhuman primates, this gene encodes a protein containing N-terminal EGF domains and a C-terminal transmembrane domain.

* Mouse GLI3 factor has a dual function as a transcriptional activator and a repressor of the sonic hedgehog (Shh) pathway, and plays a role in limb development. The GLI3 gene belongs to a family of genes that are involved in the normal shaping (patterning) of many tissues and organs during the early stages of development before birth. To carry out this role, proteins produced from genes in the GLI family attach to specific regions of DNA and help control whether particular genes are turned on or off (gene expression). The human GLI3 gene is a particularly good example as it illuminates the phenomena of pleiotropy, phenocopies, syndrome families, and evolutionary conservation of pathogenesis, and raises questions about how diagnoses are conceptualised.

* Mouse GLRA4 factor. Glycine receptors are ligand-gated chloride channels. Channel opening is triggered by extracellular glycine. Channel opening is also triggered by taurine and beta-alanine. Plays a role in the down-regulation of neuronal excitability.

Contributes to the generation of inhibitory postsynaptic currents (Probable). GLRA4 study in animals suggests a role as mediator in startle and escape responses.

* Mouse HAUS7 or UIP1 factor encodes a subunit of the augmin complex, which regulates centrosome and mitotic spindle integrity, and is necessary for the completion of cytokinesis. The human gene presents a loss or modification of the function.

* Mouse MOXD2 factor. MOXD2 is a membrane associated monooxygenase that is expressed in the medial olphactory epithelium. MOXD2 in human contains a deletion that removed the last two exons from the gene.

* Mouse NAT8 or CML1 and NAT8B or CML2 factors may affect biological processes like the glutathione metabolic process, the positive regulation of gene expression, peptidyl-lysine N6-acetylation, negative regulation of apoptotic process, cellular protein metabolic process and, the beta-amyloid metabolic process. Besides the aforementioned biological processes, CML2 may affect gastrulation with mouth forming second. The human CML2 gene appears to abolish the original function of the encoded protein because the mutation removes a major part of the known active site.

* Mouse PDE3B factor is activated in response to agents relevant for beta-cell function and activation is linked to increased as well as decreased phosphorylation of the enzyme. PDE3 is clinically significant because of its role in regulating heart muscle, vascular smooth muscle and platelet aggregation. The human PDE3B gene exon/intron boundaries present genetic polymorphism.

* Mouse S100A15A factor is a member of the S100 family of calcium-binding proteins. Human S100A15A gene is likely to be inactive because the start codon-bearing exon is deleted in human.

* Mouse TAP2 factor is involved in the transport of antigens from the cytoplasm to the endoplasmic reticulum for association with MHC class I molecules. Also acts as a molecular scaffold for the final stage of MHC class I folding, namely the binding of peptide. Nascent MHC class I molecules associate with TAP via tapasin (By similarity). The human TAP2 gene is known or presumed to produce a functionally modified protein. In this case, the stop codon allele is more prevalent than the ancestral allele, suggesting that the mutant allele is approaching fixation.

* Mouse TDH factor catalyzes the first step in 1 of the pathways wherein L-threonine is converted to glycine and acetyl-CoA. However, in human, TDH is an expressed pseudogene that produces nonfunctional proteins.

* Mouse TRPC2 factor. Plays a role in mediating responsivity to pheromones that elicit aggressive and mating behaviors. Required for response to the Esp1 pheromone which enhances female sexual receptive behavior and to the Esp22 pheromone which inhibits adult male mating behavior. This protein is not expressed in human but is in certain other species such as mouse.

* Orangutan CMAH factor. CMAH in human is disabled and thus the synthesis of a sugar called Neu5Gc deactivated. This carbohydrate is found in red meat, some fish and dairy products. If human consume products derived from animals that have the gene, the body suffers an immune reaction to sugar, which is a foreign substance in the body. This can cause an increase in the severity of atherosclerosis, a higher risk of diabetes and heart attack, inflammation, arthritis and even cancer.

* Orangutan FMO2 factor. The flavin-containing monooxygenases are NADPH-dependent enzymes that catalyze the oxidation of many drugs and xenobiotics. In most mammals, there is a flavin-containing monooxygenase that catalyzes the N-oxidation of some primary alkylamines through an N-hydroxylamine intermediate. However, in human, this enzyme is truncated and is probably rapidly degraded. In human the protein encoded by this gene represents the truncated form and apparently has no catalytic activity.

* Pig MBL1 factor encodes MBL-A, which has bacteria-binding properties in pigs and rodents but is mutated to a pseudogene in humans and chimpanzees. Its function appears to be pattern recognition in the first line of defense in the pre-immune host. MBL recognizes carbohydrate patterns found on the surface of a large number of pathogenic micro-organisms including bacteria, viruses, protozoa and fungi. Binding of MBL to a micro-organism results in activation of the lectin pathway of the complement system.

* Potoroo PHR factor encodes deoxyribodipyrimidine photolyase. PHR is involved in repair of UV radiation-induced DNA damage. Photolyase absorbs blue light and employs the energy to remove UV-induced DNA damage or lesions. These enzymes have been found in many living organisms ranging from bacteria to aplacental mammals, but their photoreactivationeffect, such as survival increase of UV-irradiated cells by light-illumination, has not been identified in placental mammals, including human.

* Rat GULO factor produces the precursor to ascorbic acid, which spontaneously converts to the vitamin C. The anti-oxidant vitamin C is a water-soluble molecule that protects organisms from oxidative stress and is essential to collagen production. Production of collagen is necessary to prevent development of the pathology known as scurvy. Other documented functions of vitamin C include its participation in the synthesis of carnitine, neurotransmitters, and the catabolism of tyrosine. Loss of the vitamin C pathway due to deletions in the GULO (L-gulonolactone oxidase) gene has been detected in humans, apes, guinea pigs, bats, mice, rats, pigs, and passerine birds. The loss of gene function for gluconolactonase not only affects the synthesis of L-gulono-1,4-lactone, but also affects caprolactam degradation, the pentose phosphate pathway, and other processes.

* Rhesus macaque CASP12 encodes the protein which belongs to a family of enzymes called caspases which cleave their substrates at C-terminal aspartic acid residues. It is

closely related to caspase 1 and other members of the caspase family, known as inflammatory caspases, which process and activate inflammatory cytokines such as interleukin 1 and interleukin 18. The CASP12 gene is subject to polymorphism, which can generate a full length caspase protein (Csp12L) or an inactive truncated form (Csp12S).

* Rhesus macaque Theta Defensins or retrocyclins are primate peptides that protect cells from infection by T- and M-tropic strains of HIV-1 They belong to the theta-defensin family of genes intact in Old World monkeys. In human they have a premature stop codon that prevents their expression; they thus exist as pseudogenes. Upon correction of the premature termination codon in theta-defensin pseudogenes, human myeloid cells produce cyclic, antiviral peptides -“retrocyclins”- indicating that the cells retain the intact machinery to make cyclic peptides. Theta-defensins are the only known cyclic peptides in mammals and act primarily by preventing viruses such as HIV-1 from entering cells.

1.3.1.4 RT-MB

https://archive.org/details/Resonant_Therapy-Molecular_Biology

Dr. Alfred Partheil was the first scientist to suggest a correlation between substances, or specifically chemical elements, and frequency. " The atoms of each element have a certain weight, and the atoms of different basic constituents differ from each other in a characteristic way through their different weights. While we cannot absolutely establish these atomic weights, we are well able to determine the relationship of these weights to each other." (Dr. Alfred Partheil - On The Numerical Relationship Of Atomic Weights)

Sound waves are just another type of wave. Listen to the mp3's as if you were enjoying the sound of the sea at a beach. Remember, using this type of therapy on others without their consent is not ethically sound.

Recordings based upon Malacards data start from RT-MB26. Malacards is updated every year with the latest data from a number of sources. The term 'Genetic Superpathways' refers to sets of 2 to 6 genes under the section with this name at Malacards website -present at the time the mp3 was produced. Using only the information found in the Genetic Superpathways section is preferred here because the process works akin to computer programs coded to achieve desirable outcomes.

You are advised to gather more information about the products listed through web inquiry.

Andropause, Anti Aging-HGH, Anti Aging-Stem Cells, Anti Aging Gene Therapy, Bone Loss Molecular Therapy, Fibromyalgia Molecular Therapy, Herpes Zoster Gene Therapy, Human Vomeronasal Stimulation, Influenza Molecular Therapy, Injury

Recovery Molecular Therapy, Melanoma Gene Therapy, Menopause, Muscle Wastage Gene Therapy, N-Glycolylneuraminic Acid Stimulation, Nerve Regeneration Molecular Therapy, Olfactory Receptors Stimulation, Physical Endurance Profile Gene Therapy, Rheumatoid Arthritis Molecular Therapy, Secondary Lymphedema Gene Therapy, UV Protection, Urate Oxidase Stimulation

* Andropause, addresses common manopause issues such as osteoarthritis, arthritis rheumatoid, enlarged prostate, knee problems, graying hair or diabetes. Immunosuppressants, omega 3 acids, superoxide dismutases, antioxidants and sex hormone-binding globulin (SHBG). Unless stated otherwise each item plays for 3m. Left channel: Golimumab, Etanercept, Certolizumab pegol, SOD 1, SOD 3, SOD 2, DHA, AA, EPA, ALA. Right channel: SHBG glycoprotein (6m), Catalase, 3,4-Divanillyltetrahydrofuran (6m), SDA, Alpha Lipoic acid, Indole-3-Carbinol (6m), Zinc.

* Anti aging HGH, a focus on the endocrine hormone produced by the pituitary gland and insuline activation by IGF-1. Decreasing levels of HGH raise risks of body fat, bone fragility, weak/wrinkled skin, reduced energy, and loss of memory. Unless stated otherwise each item plays for 3m. Left channel: Phosphatidylinositol, GHRH, Ibutamoren, Capromorelin, Macimorelin, HGH, CJC-1295, Somatrem, GABA, Lysine, Ornithine (2m). Right channel: IGF-1, Protopanaxatriol, Protopanaxadiol, Stigmastanol, beta-Sitosterol, Stigmasterol, Phosphatidylserine, Tryptophan, Arginine, Glutamine, Glycine (2m).

* Anti aging stem cells, six factor approach to reprogram senescent cells into induced pluripotent stem cells (iPSC's). Gene factors used, according to INSERM's AVENIR "Genomic plasticity and aging" team, are KLF4, MYC, NANOG, SOX2, LIN28 and OCT4.

* Anti aging gene therapy, targets shortening of telomeres which protect the end of the chromosomes from deterioration or from fusion with neighboring chromosomes. It also provides support for mitochondrial function and regulation of genes that affect energy metabolism. Unless stated otherwise each item plays for 4m. Left channel: SIRT1 protein, Astragaloside, PPARGC1A protein (8m), Glutathione, DHEA, Genistein, Sulforaphane. Right channel: PPARGC1A protein, Cycloastragenol, SRT1720, LMNA protein, 5a-Androstane-3b,17b-diol, Daidzein, Resveratrol, Selenium.

* Bone loss molecular therapy, a mix of bisphosphonates, monoclonal antibodies, an alkaline phosphatase inhibitor, a dual action antiosteoporitic agent, and gene encoded proteins for bone loss and diseases of bone metabolism. Romosozumab, Blosozumab, Denosumab, BMP7, Osteoprogeterin, BMP2, Teriparatide, Strontium Ranelate, Zoledronic Acid, and Homoarginine.

* Fibromyalgia molecular therapy, plays antiemetic drugs and serotonin 5-HT 3 receptor antagonists, a melatonin receptor agonist, a tricyclic muscle relaxant, a serotonin–

norepinephrine reuptake inhibitor (antidepressant and pain treatment), a prodrug to the neurotransmitters norepinephrine (noradrenaline) and epinephrine (adrenaline), an anticonvulsant, kappa-opioid receptor (KOR) and delta-opioid receptor (DOR). Unless stated otherwise each item plays for 3 minutes. Sequence: KOR (2m), DOR (2m), Azasetron, Tropisetron hydrochloride, Piromelatine, Tropisetron, Cyclobenzaprine, Milnacipran, Droxidropa, Pregabalin, KOR (2m), DOR (2m).

* Herpes zoster gene therapy, includes antiviral, symptom management and postherpetic neuralgia agents. Each item plays for 2m. In playing order, Botox, Fasinumab, Alefacept, Immune system normalization frequency, Astaxanthin, Substance P, NGF precursor, Opipramol, Prednisone, Docosanol, Famciclovir, Capsaicin, Foscarnet, Caladryl, Vidarabine, Tromantadine, Taribavirin, Cidovir, Lidocaine, Morxydine, Sodium Bromide.

* Human vomeronasal stimulation targets type 1 receptors of the vomeronasal organ. These receptors are thought to be responsible for pheromone detection. The frequencies for the receptors VN1R1, VN1R2, VN1R3, VN1R4, and VN1R5 are included. Some of them appear to be functionless. (See notes below for pseudogene rationale)

* Influenza molecular therapy, frequencies for viral replication, neuraminidase and M2 protein inhibiton, immune system stimulation, antivirals, and symptomatic relief. Unless stated otherwise each item plays for 3m. Left channel: Bavituximab, Diridavumab, Interferon alpha-2b, Arbidol, Lactoferrin, Anoro Ellipta, Oseltamivir, Zanimivir, Peramivir, Rimantadine, Amantadine (2m). Right channel: Vitamin B12, Folic acid, Tocopherol, Calcitriol, Vitamin B6, Elenolic acid, Tymazoline, Ascorbic acid, Pseudoephedrine, Acetylcysteine, Acetaminophen (2m).

* Injury recovery and range of motion molecular therapy. Each item plays for 3m. Left channel: MMP8, Serrapeptase, Pancreatin, MMP1, SDHC, Decorin, Nattokinase, Papain, SMAD3, Rutin. Right channel: Chymotrypsin C, MMP9, Chymotrypsin A, Iduronidase, PEPCK cytosolic, SLC22A4, Bromelain, Trypsin, Mannose-6-phosphate, Ergothioneine.

* Melanoma gene therapy, including metastatic melanoma. In playing order, Pembrolizumab, Peginterferon alpha-2b, Interferon alpha-2b, Proleukin, Phosphatase and tensin homolog (PTEN), Tremelimumab, Melanocortin 1 receptor (MC1R), Trametinib, Afamelanotide, BMS-470,539, Dabrafenib, Vemurafenib, Recombinant interferon alpha-2b, Ipilimumab, Rasagiline.

* Menopause, for women of age and also used for males with fertility, libido or sexual dysfunction issues. Unless stated otherwise each item plays for 3m. Left channel: Human chorionic gonadotropin (hCG) beta, Luteinizing hormone (LH), Follitropin subunit beta (FSHB), hCG alpha, Recombinant hCG, Estrogen receptor 1 (ESR1), Calcitriol, Urofollitropin, Beta sitosterol, Stigmasterol (2m), ESR2 (2m). Right channel: UK-414,495, Progesterone, Levonorgestrel, Ellagic acid, Estradiol, Genistein, Daidzein,

Alendronate, Equol (2m), PF-219,061 (2m).

* Muscle wastage gene therapy is conceived to counter aging related loss of muscle mass. The strategy employed involves myostatin, NF-kB signaling and TNF inhibition; insulin-like growth factor replacement, nNOS pathway enhancement, TGF-beta regulation, and anti-oxidants. Unless stated otherwise each item plays for 3m. Left channel: Etanercept, Stamulumab (6m), Thymosin beta-4, HSP90B1, Taladafil, ACVR2B (6m), Mecasermin, Nitroflurbiprofen, Formosterol (2m). Right channel: Coenzyme Q10, Cobalamin, Epigallocatechin-3-gallate, Curcumin, Carnitine, Ornithine, Leucine, Creatine, Valine, Proline, Serine (2m).

* N-Glycolylneuraminic acid (Neu5Gc) stimulation translates the molar weight of this sialic acid molecule into Hz. Humans cannot synthesize it due to manipulation in the past of the gene CMAH. The recording includes as well the the translation into Hz of the Neu5Gc based monoclonal antibody Racotumomab. It is a therapeutic cancer vaccine for the treatment of solid tumors. (See notes below for pseudogene rationale)

* Nerve regeneration molecular therapy, for neuropathies in general, expresses gangliosides, aceyl-L-carnitine, neurotrophins, nerve growth factors, erythropoietin and Fasinumab. The sequence plays in this order Fasinumab, EPO recombinant, GT1b, GD's (1a, 1b, 2, 3), NGF beta recombinant, GM's (1, 2, 3), Neurotrophin-3, NGF, bNGF recombinant, NGF beta, NGF beta recombinant, NTF4, EPO recombinant, EPO, Acetyl-L-carnitine.

* Olfactory receptors stimulation. The Olfactory Receptors (OR) included are OR2T2P, OR10T1P, OR10R1P, OR10R3P, OR2W3P. (See notes below for pseudogene rationale)

* Physical endurance profile gene therapy (revised and updated) is based upon Dr. Henning Wakerhage's notes to produce enhanced physical performance. The recording plays 150s each item, ACVR2B as Myostatin inhibitor, Glyc Synthase GYS1, EPO, PPAR-gamma, ACTN3 (1-576) to turn down the whole gene, PGC-1alpha or PPARGC1A, MEK1 or MAP2K1, PEPCK1 cytosolic, MAPK12, GH1, Ras or AGTR2, Calcineurins, PI3K, IGF1, and MK-2206 as PKB inhibitor in order.
Rationale,
Muscle hypertrophy (-) Myostatin inhibitor ACVR2B = 388.941 Hz
Raised muscle glycogen (+) Glyc Synthase GYS1 = 564.546 Hz
Higher haematocrit (+) EPO = 390.252 Hz
Fibre type and mitochondria biogenesis (+), for endurance running (-) PPAR-gamma = 388.239 Hz
Fibre type (-) ACTN3 1-576 = 447.837 Hz
Fibre type and mitochondria biogenesis (+) PGC-1alpha or PPARGC1A = 613.278 Hz
Myocardial hypertrophy (+) MEK1 or MAP2K1 = 795.612 Hz
Endurance running (+) PEPCK1 cytosolic = 466.197 Hz
Fibre type (+) MAPK12 = 768.135 Hz
Longer legs (+) GH or GH-1 = 455.024 Hz
Fibre type (+) Ras AGTR2 = 754.311 Hz

Fibre type (+) Calcineurins PPP3CA = 395.391 Hz, PPP3CB = 398.322 Hz, PPP3CC = 399.330 Hz
Myocardial hypertrophy (+) PI3K = 837.492 Hz
Muscle hypertrophy (+) IGF1 = 848.307 Hz
Muscle hypertrophy (-) PKB inhibitor MK-2206 = 407.478 Hz
(+)(-) refers to turning up or down gene' expression

* Rheumatoid arthritis molecular therapy features monoclonal antibodies to inhibit tumor necrosis factor-alpha and interleukin-6 receptors. The goal is to reduce excessive immune reactions. Unless stated otherwise each item plays for 6m. Left channel: Curcumin/Piperine/Quercetin (2m), Golimumab, Tocilizumab, Adalimumab, Etanercept, Certolizumab pegol. Right channel: Curcumin/Piperine/Quercetin (2m), Stigmastanol, Glucosamine, Taurine, Niacin, MSM.

* Secondary lymphedema gene therapy, presents gene factors triggered during a 2013 study by Miaskowski et al. where genetic regression analysis found four genes (lymphocyte cytosolic protein2- LCP2, neuropilin2-NRP2, protein tyrosine kinase-SYK, and vascular adhesion molecule1-VCAM1) and 3 haplotypes (forkhead box protein C2-FOXC2, neuropilin2-NRP2, and vascular endothelial growth factor C-VEGFC) associated with secondary lymphedema. Each item plays for 5m, in order, FOXC2, VEGFC, NRP2, VCAM1, SYK, LCP2.

* UV protection, based on a study by Foley, L. E. et al. Human cryptochrome exhibits light-dependent magnetosensitivity (2011). The recording expresses both human cryptochromes CRY1 and CRY2 along with omega 3's and other substances used for UV protection. Each item plays for one minute unless stated otherwise. The sequence in order, Hearth Chakra body and energy tuner (1m 40s), Astaxanthin, Prodelphinidin B3, Lutein, Lycopene, Epigallocatechin gallate, CRY1 (2m), CRY2 (2m), 6',7'-Dihydroxybergamottin, Bergamoitin, DHA, Gallocatechol, AA, EPA, Ellagic acid, Auraptene, Catechin, Fisetin, ALA, SDA, Resveratrol, Bergapten, Bergaptol, Sulforaphane.

* Urate oxidase stimulation, UO is an enzyme that catalyzes the oxidation of uric acid to allantoin in most mammals, but not in humans. Rasburicase and another recombinant human version of the enzyme are included. (See notes below for pseudogene rationale)

1.3.1.5 RT-MB-02

https://archive.org/details/Resonant_Therapy-Molecular_Biology_02

ACE, ACTN3, ACVR2A, ACVR2B, APC, APP, AQP1, AQP2, AQP3, AQP4, AR, BDNF, BMP2, BMP7, BRCA1, BRCA2, CAT, CCR5, CD28, CD4, CD8A, CD8B, CFTR, CRH, CRH1, CRY1, CRY2, CXCR4, DSG4, EPO, ESR1, ESR2, FLG, FOXC2, FSHB, GDF8, GH1, GH2, GHIH, GHRH, GHRHR, HCG-Alpha, HCG-Alpha&Beta, HCG-Beta, HFE, HGD, HSP90B1, IGF1, IL1-Alpha, IL1-Beta, IL1RN, IL2, IL6, INS, KLF4, LCP2, LH-

Beta, LHX2, LIN28A, LMNA, MAPK12, MC1R, MC3R, MC4R, MEK1, MITF, MMP1, MMP8, MMP9, MYC, NANOG, NGF, NRP1, NRP2, NTF4, OCT4, OPG, OPRD1, OPRK1, OPRM1, PCSK9, PEPCK1, PEPCK2, PI3K, PIP, PKB1, PKB2, PKB3, PPARA, PPARD, PPARG2, PPARGC1A, PPP3CA, PPP3CB, PPP3CC, PPP3R1, PPP3R2, PRKCA, PRKCB, PRKCD, PRKD1, PRKD2, PRKD3, PTEN, PTGDR2, RAS-AGTR1, RAS-AGTR2, RHOA, SDHC, SHBG, SIRT1, SLC22A4, SMAD3, SOX2, SYK, TCHH, TNF-Alpha, TP53, TRPM8, TRPV1, TRPV2, VCAM1, VEGFC, WNT1, WNT2, WNT2b, WNT3, WNT3a, WNT4, WNT5a, WNT5b, WNT6, WNT7a, WNT7b, WNT8a, WNT8b, WNT9a, WNT9b, WNT10a, WNT10b, WNT11, WNT16, WNTLESS,

Sound Frequency Expression Of The DNA

Human DNA is not only responsible for the construction of our body but also serves as data storage and in communication. Chromosomes function just like solitonic/holographic computers. Gene regulatory networks approximate a hierarchical scale free network topology. Regulation of gene expression is a mechanism used by cells to increase or decrease the production of specific gene products (protein or RNA). Living DNA substance (in living tissue, not in vitro) does react to sound (wavelength and frequency) if the proper frequencies are being used.

In genetics, gene expression is the most fundamental level at which the genotype gives rise to the phenotype. The genetic code stored in DNA is interpreted by gene expression, and the properties of the expression give rise to the organism's phenotype. Listening the equivalent frequency of the molecular mass to a protein's reference sequence may help modulate, modify and restore associated products.

Only short descriptions are included here. Find out more details through web search. Thank you,

<u>Calculation Of Frequencies</u>

Alfred Partheil discovered that the spectral lines of the elements were in proportion to the atomic weights. Therefore, he concluded that atomic weight and frequency of tones were equivalent, writing the formula, Frequency = atomic weight * 16. His statement can be simplified for ease of use as follows: frequency is equivalent (actually directly related) to molecular weight. (A Summary of Sound Therapy and Vibrational Healing Concepts. William L. Meyer, M.Engr. Georgia Neff, Ph.D. Lauren Garfield-O’ Brien, R.N. December 2003)

The first step to calculate the value in Hz of a protein or peptide is to find the reference sequence of the human protein in databases linked to Wikipedia such as Uniprot. The molecular mass or weight can be found there along with the sequence of amino acids. It is always posible to calculate the molecular weight of a sequence(usually the canonical) by copying the FASTA data into an appropiate online calculator such as Prot-MW

(http://www.encorbio.com/protocols/Prot-MW.htm). The resulting answer in Daltons may be converted further into lower scalar octaves.

For example, let's calculate the frequency for the VEFGC (vascular endothelial growth factor C) gene.

1. The protein VEFGC reference sequence from a database in FASTA format is:
MHLLGFFSVACSLLAAALLPGPREAPAAAAAFESGLDLSDAEPDAGEATAYASKDLEEQ
LRSVSSVDELM
TVLYPEYWKMYKCQLRKGGWQHNREQANLNSRTEETIKFAAAHYNTEILKSIDNEWRK
TQCMPREVCIDV
GKEFGVATNTFFKPPCVSVYRCGGCCNSEGLQCMNTSTSYLSKTLFEITVPLSQGPKP
VTISFANHTSCR
CMSKLDVYRQVHSIIRRSLPATLPQCQAANKTCPTNYMWNNHICRCLAQEDFMFSSDA
GDDSTDGFHDIC
GPNKELDEETCQCVCRAGLRPASCGPHKELDRNSCQCVCKNKLFPSQCGANREFDE
NTCQCVCKRTCPR
NQPLNPGKCACECTESPQKCLLKGKKFHHQTCSCYRRPCTNRQKACEPGFSYSEEV
CRCVPSYWKRPQMS

2. Calculate the molecular weight of the protein copying the sequence into an online calculator :
MW is 46891.07 Daltons, or 46.89 KiloDaltons

3. Convert 46891.07 Hz into the nearest scalar octave under 1Khz (using Frex 16 - build 08.10,17):
VEFGC = 858.840 Hz

Binary Vs Scalar Octaves

In music, an octave or diapason is the interval between one musical pitch and another with half or double its frequency. Binary octaves are calculated by multiplying or dividing by two, because two is the base of the binary numeral system. Furthermore, the effect on function is such that does not change -invariant, under the transformations from a given linear group.

Scalar octaves belong to quantum physics. They have a symmetry of the action, but not of the measure, and so not of the partition function as a whole, thus causing logarithmic scale-invariance.

In my personal opinion and experience, scalar octaves are more sophisticated and effective than binary octaves. To calculate scalar octaves there are few choices and they are likely to give different results. I stick to the conversion tool in the freely downloadable program FreX 16 which does automatic conversions to binary and scalar octaves. Note that the musical key of the recordings (shown in brackets after the

frequency) has been choosen in direct relationship to the location in the body of the product's maximum expression, and the folllowing criteria was used for keys:

B = upper half of brain
A = lower half of brain
G = face, ears, eyes, nose, mouth, throat, muscles, bones, nerves, connective tissue
F = lungs, heart, blood, lymph, skin, immune system
E = stomach, liver, pancreas, spleen
D = kidneys, bladder, prostate, vagina
C = colon, genitals

Oster-Like Curve

Used for magification of signal in generators dependent on carrier frequency specification. The first and second column lists the
values from-to in Hz. The third column lists the suggested carrier frequency in Hz.
0-50 - 500
50-100 - 1000
100-150 - 1500
150-200 - 2000
200-250 - 2500
250-300 - 3000
300-350 - 3500
350-400 - 4000
400-500 - 4500
500-550 - 4000
550-600 - 3500
600-700 - 3000
700-750 - 2500
750-950 - 2000
950-1000 - 1500

Index

ACE - Angiotensin-converting enzyme
ACTN3 - Alpha-actinin skeletal muscle isoform 3
ACVR2 - Activin type 2 receptors
APC - Adenomatous polyposis coli
APP - Amyloid precursor protein
AQP - Aquaporin (1 to 4)
AR - Androgen receptor
BDNF - Brain-derived neurotrophic factor
BMP2 - Bone morphogenetic protein 2
BMP7 - Bone morphogenetic protein 7

BRCA - Breast cancer early onset (1&2)
CAT - Catalase
CCR5 - C-C chemokine receptor type 5
CD28 - Cluster of Differentiation 28
CD4 - Cluster of differentiation 4
CD8 - Cluster of differentiation 8 (A&B)
CFTR - Cystic fibrosis transmembrane conductance regulator
CN - Calcineurin or protein phosphatase 3 (PPP3- /CA/CB/CC/R1/R2)
CRH - Corticotropin-releasing hormone, and receptor CRH1
CRY1 - Cryptochrome 1
CRY2 - Cryptochrome 2
CXCR4 - Fusin or C-X-C chemokine receptor type 4
DSG4 - Desmoglein-4
EPO - Erythropoietin
ESR1 - Estrogen receptor alpha
ESR2 - Estrogen receptor beta
FLG - Filaggrin
FOXC2 - Forkhead box protein C2
FSHB - Follitropin subunit beta or follicle-stimulating hormone beta subunit
GDF8 - Myostatin or growth differentiation factor 8
GH - Somatropin or https://en.wikipedia.org/wiki/Glomerulonephritis (1 and 2)
GHIH - Somatostatin or growth hormone-inhibiting hormone
GHRH - Growth-hormone-releasing hormone
GHRHR - Growth-hormone-releasing hormone receptor
HCG - Human chorionic gonadotropin
HFE - Human hemochromatosis protein
HGD - Homogentisicase
HSP90B1 - Endoplasmin or Heat shock protein 90kDa beta member 1
IGF1 - Somatomedin C or insulin-like growth factor 1
IL1 - Interleukin-1 (alpha beta and antagonist receptor IL1RN)
IL2 - Interleukin 2
IL6 - Interleukin 6 or interferon-B2 or cytotoxic T-cell differentiation factor
INS - Insulin
KLF4 - Kruppel-like factor 4
LCP2 - Lymphocyte cytosolic protein 2
LH - Lutropin or luteinizing hormone
LHX2 - LIM/homeobox protein Lhx2
LIN28A - Lin-28 homolog A
LMNA - Lamin A/C
MAPK12 - Mitogen-activated protein kinase 12
MC1R - Melanocortin 1 receptor
MC3R - Melanocortin 3 receptor
MC4R - Melanocortin 4 receptor
MEK1 - Mitogen-activated protein kinase kinase 1 or MAP2K1
MITF - Microphthalmia-associated transcription factor
MMP1 - Matrix metalloproteinase-1 or fibroblast collagenase

MMP8 - Matrix metalloproteinase-8 or neutrophil collagenase
MMP9 - Matrix metalloproteinase-9 or gelatinase B
MYC - V-myc myelocytomatosis viral oncogene homolog (avian)
NANOG - Nanog homeobox
NGF - Nerve growth factor beta
NRP - Neuropilin (1&2)
NTF4 - Neurotrophin-4
OCT4 - Octamer-binding transcription factor 4
OPG - Osteoprotegerin
OPRD1 - D-opioid receptor
OPRK1 - K-opioid receptor
OPRM1 - Mu-opioid receptor
PCSK9 - Proprotein convertase subtilisin/kexin type 9
PEPCK - Phosphoenolpyruvate carboxykinase (1&2)
PI3K - Phosphatidylinositol-4,5-bisphosphate 3-kinase
PIP - Prolactin-inducible protein
PKB - Protein Kinase B or Akt (1,2 and 3)
PKC - Protein kinase C (PRKCA, B, D, and PRKD1, 2, 3)
PPARA - Peroxisome proliferator-activated receptor alpha
PPARD - Peroxisome proliferator-activated receptor beta or delta
PPARGC1A - Peroxisome proliferator-activated receptor gamma coactivator 1-alpha
PPARG2 - Peroxisome proliferator-activated receptor gamma or glitazone receptor
PTEN - Phosphatase and tensin homolog
PTGDR2 - G protein-coupled receptor 44 or GPR44
RAS - Angiotensin receptor (1&2)
RHOA - Ras homolog gene family member A
SDHC - Succinate dehydrogenase complex subunit C
SHBG - Sex hormone-binding globulin
SIRT1 - Sirtuin 1
SLC22A4 - Solute carrier family 22 member 4
SMAD3 - Mothers against decapentaplegic homolog 3
SOX2 - Sex determining region Y-box 2, or SRY
SYK - Spleen tyrosine kinase
TCHH - Trichohyalin
TNF-alpha - Cachexin or tumor necrosis factor alpha
TP553 - Tumor protein p53
TRPM8 - Transient receptor potential cation channel subfamily M member 8
TRPV1 - Transient receptor potential cation channel subfamily V member 1
TRPV2 - Transient receptor potential cation channel subfamily V member 2
VCAM1 - Vascular cell adhesion protein 1
VEGFC - Vascular endothelial growth factor C
WNT - Wnt signaling pathway (1 to 11 and 16)
WNTLESS - G protein-coupled receptor 177 or wntless

ACE

Angiotensin-converting enzyme, or "ACE" indirectly increases blood pressure by causing blood vessels to constrict. Elevated levels of ACE are found in sarcoidosis, and are used in diagnosing and monitoring this disease. Elevated levels of ACE are also found in leprosy, hyperthyroidism, acute hepatitis, primary biliary cirrhosis, diabetes mellitus, multiple myeloma, osteoarthritis, amyloidosis, Gaucher disease, pneumoconiosis, histoplasmosis, miliary tuberculosis. Serum levels are decreased in renal disease, obstructive pulmonary disease, and hypothyroidism.

ACE gene is a I/D polymorphism leading to the presence(I) or absence (D) the carriers of the ACE insertion allele of an alu repeat in intron 16 of the gene. With the insertion, observed higher maximum oxygen uptake (VO2max), increase in training, and increased muscle when paired with individuals carrying the deletion allele.

Individuals with the insertion are associated with long distance and endurance events this is seen in studies that suggest that its due to lower levels of angiotensin II. The other side is the deletion of the Alu that is increases angiotensin II that increases the vasoconstriction of blood vessels. This observed in short distance events and seen mostly in swimmers.

ACE = 371.091 Hz (F)

ACTN3

Alpha-actinin-3, also known as alpha-actinin skeletal muscle isoform 3 or F-actin cross-linking protein, is a protein that in humans is encoded by the ACTN3 gene. Alpha-actinin is an actin-binding protein with multiple roles in different cell types. This gene expression is limited to skeletal muscle. It is localized to the Z-disc and analogous dense bodies, where it helps to anchor the myofibrillar actin filaments. Skeletal muscle is composed of long cylindrical cells called muscle fibers. There are two types of muscle fibers, slow twitch or muscle
contraction (type I) and fast twitch (type II). Slow twitch fibers are more efficient in using oxygen to generate energy, while fast twitch fibers are less efficient. However, fast twitch fibers fire more rapidly and generate more force. Fast twitch fibers and slow twitch fibers are also called white muscle fibers and red muscles fibers, respectively. Each muscle fiber is composed of long tubes called myofibrils which in turn are composed of filaments. There are two types of filaments: actin (thin filaments) and myosin (thick filaments) which are arranged in parallel. A muscle contraction involves these filaments sliding past each other.

Actin filaments are stabilized by actin binding proteins known as actinins of which there are two main types, type 2 and type 3. Each of these is encoded by a specific gene, ACTN2 and ACTN3 respectively. ACTN2 is expressed in all skeletal muscle fibers whereas ACTN3 is expressed only in fast twitch fibers. A mutation (rs1815739; R577X) has been identified in the ACTN3 gene which results in a deficiency of alpha-actinin 3 in a significant proportion of the population. Based on ethnicity the deficiency is found in 20-50% of people. Generally, Africans have the lowest incidence of the mutation while Asians have the highest. Studies have linked the fiber twitch type with ACTN3, i.e. fast twitch fiber abundant individuals carry the non-mutant gene version.

Also, studies in elite athletes have shown that the ACTN3 gene may influence athletic performance. While the non-mutant version of the gene is associated with sprint

performance, the mutant version is associated with endurance.
ACTN3 = 695.504 Hz (F)

ACVR2
The Activin type 2 receptors modulate signals for ligands belonging to the Transforming growth factor beta superfamily of ligands. These include: Activin (or Inhibin), Bone morphogenetic proteins and Nodal. They are involved in a host of physiological processes including, growth, cell differentiation, homeostasis, osteogenesis, apoptosis and many other functions. The ACVR2 gene is often found inactivated in prostate cancer and tumors with microsatellite instability. In the lab, it has been shown that truncated mutations in the ACVR2 gene causes a significant reduction in activin mediated cell signaling. In 58.1% of microsatellite unstable (MSI-H) colorectal cancers the ACVR2A gene has been found mutated. It also plays a role in non-MSI-H colorectal cancers.
ACVR2B plays an important role in regulation of muscle growth.
ACVR2A = 389.729 Hz (F)
ACVR2B = 388.782 Hz (F)

APC
Adenomatous polyposis coli (APC) also known as deleted in polyposis 2.5 (DP2.5) is a protein that in humans is encoded by the APC gene. The APC protein is a negative regulator that controls Beta-catenin concentrations and interacts with E-cadherin, which are involved in cell adhesion. Mutations in the APC gene may result in colorectal cancer. APC is classified as a tumor suppressor gene. Tumor suppressor genes prevent the uncontrolled growth of cells that may result in cancerous tumors. The protein made by the APC gene plays a critical role in several cellular processes that determine whether a cell may develop into a tumor. The APC protein helps control how often a cell divides, how it attaches to other cells within a tissue, or whether a cell moves within or away from a tissue.
The most common mutation in colon cancer is inactivation of APC. When APC does not have an inactivating mutation, frequently there are activating mutations in beta catenin. Mutations in APC can be inherited, or arise sporadically in the somatic cells, often as the result of mutations in other genes that result in the inability to repair mutations in the DNA.
APC directs cholinergic synapse assembly between neurons, a finding with implications for autonomic neuropathies, for Alzheimer's disease, for age-related hearing loss, and for some forms of epilepsy and schizophrenia.
APC = 772.580 Hz (F)

APP
Amyloid precursor protein (APP) is an integral membrane protein expressed in many tissues and concentrated in the synapses of neurons. Its primary function is not known, though it has been implicated as a regulator of synapse formation, neural plasticity and iron export. APP is best known as the precursor molecule whose proteolysis generates beta amyloid (Abeta), a 37 to 49 amino acid peptide whose amyloid fibrillar form is the primary component of amyloid plaques found in the brains of Alzheimer's disease

patients.
The most-substantiated role for APP is in synaptic formation and repair; its expression is upregulated during neuronal differentiation and after neural injury. Roles in cell signaling, long-term potentiation, and cell adhesion have been proposed and supported by as-yet limited research. APP knockout mice are viable and have relatively minor phenotypic effects including impaired long-term potentiation and memory loss without general neuron loss. On the other hand, transgenic mice with upregulated APP expression have also been reported to
show impaired long-term potentiation.
A different perspective on Alzheimer's is revealed by a mouse study that has found that APP possesses ferroxidase activity similar to ceruloplasmin, facilitating iron export through interaction with ferroportin; it seems that this activity is blocked by zinc trapped by accumulated Abeta in Alzheimer's. The amyloid-beta precursor protein (A?PP) and all associated secretases are expressed early in development and plays a key role in the endocrinology of reproduction – with the differential processing of A?PP by secretases regulating human embryonic stem cell (hESC) proliferation as well as their differentiation into neural precursor cells (NPC).
Recently, amyloid precursor protein (APP) origin was demonstrated with arthritogenic animals. The source noted is breakdown of immune complexes, where the amyloid aggregates are left degraded and bind together to form coil like structures that are not resorbed. Also, it induces secondary inflammation, which may cause local damage.
APP = 585.463 Hz (F)

AQP
Aquaporins are integral membrane proteins from a larger family of major intrinsic proteins (MIP) that form pores in the membrane of biological cells.
AQP1 is a widely expressed water channel, whose physiological function has been most thoroughly characterized in the kidney. A small number of people have been identified with severe or total deficiency in aquaporin-1. It is interesting to note that they are, in general, healthy, but exhibit a defect in the ability to concentrate solutes in the urine and to conserve water when deprived of drinking water. Mice with targeted deletions in aquaporin-1 also exhibit a deficiency in water conservation due to an inability to concentrate solutes in the kidney medulla by countercurrent multiplication.
AQP2 is found in the apical cell membranes of the kidney's collecting duct principal cells and in intracellular vesicles located throughout the cell. It is the only aquaporin regulated by vasopressin. The basic job of aquaporin 2 is to reabsorb water from the urine while its being removed from the blood by the kidney. This aquaporin is also regulated by food intake. Fasting reduces expression of this aquaporin independently of vasopressin. Mutations in this channel are associated with nephrogenic diabetes insipidus, which can be autosomal dominant or recessive. Mutations in the vasopressin receptor cause a similar X-linked phenotype. The expression of the AQP2 gene is increased during conditions associated with water retention such as pregnancy and congestive heart failure.
Aquaporin 3 is found in the basolateral cell membrane of principal collecting duct cells and provide a pathway for water to exit these cells. Aquaporin-3 facilitates epidermal cell migration and proliferation during wound healing. Aquaporin 4 also known as AQP4

is a protein which in humans is encoded by the AQP4 gene. AQP4 belongs to the aquaporin family of integral membrane proteins that conduct water through the cell membrane.
Aquaporin-4 has been proposed as the primary autoimmune target in neuromyelitis optica. Autoimmune reactions against aquaporin 4 produce Devic's disease.
AQP1 = 993.642 Hz (F)
AQP2 = 528.207 Hz (F)
AQP3 = 577.803 Hz (F)
AQP4 = 638.004 Hz (A)

AR
The AR gene provides instructions for making a protein called an androgen receptor. Androgens are hormones (such as testosterone) that are important for normal male sexual development before birth and during puberty. Androgen receptors allow the body to respond appropriately to these hormones. The receptors are present in many of the body's tissues, where they attach (bind) to androgens. The resulting androgen-receptor complex then binds to DNA and regulates the activity of androgen-responsive genes. By turning the genes on or off as necessary, the androgen receptor helps direct the development of male sexual characteristics. Androgens and androgen receptors also have other important functions in both males and females, such as regulating hair growth and sex drive. The androgen insensitivity syndrome, formerly known as testicular feminization, is caused by a mutation of the androgen receptor.
AR - 668.305 Hz (E)

BDNF
Brain-derived neurotrophic factor, also known as BDNF, is a secreted protein that, in humans, is encoded by the BDNF gene. BDNF is a member of the "neurotrophin" family of growth factors, which are related to the canonical "nerve growth factor", NGF. Neurotrophic factors are found in the brain and the periphery. BDNF acts on certain neurons of the central nervous system and the peripheral nervous system, helping to support the survival of existing neurons, and encourage the growth and differentiation of new neurons and synapses.
In addition to its production and functions in the brain and nervous system, BDNF secreted by contracting skeletal muscle has been found to play a role in muscle repair, regeneration, and differentiation.
BDNF increases in brain tissue in response to acute exercise and exercise training and may account for the effect of exercise in the protection against neurodegenerative diseases such as dementia. Additional benefits of exercise on brain function are also reported, including increases in grey and white matter in the prefrontal cortex and growth in hippocampal volume, with BDNF known to play a role in these effects. Caffeine improves recognition memory, and this effect may be related to an increase of the BDNF and TrkB immunocontent in the hippocampus.
BDNF activity is correlated with increased long term potentiation and neurogenesis, which can be induced by physical activity. Long term potentiation is shown to improve learning and memory by strengthening the communication between specific neurons. Various studies have shown possible links between BDNF and conditions such as

depression, bipolar disorder, schizophrenia, obsessive-compulsive disorder, Alzheimer's disease, Huntington's disease, Rett syndrome, and dementia, as well as anorexia nervosa and bulimia nervosa. High levels of BDNF and Substance P have been found associated with increased itching in eczema. Epilepsy has also been linked with polymorphisms in BDNF. BDNF is a critical regulator of drug dependency.
BDNF = 509.664 Hz (F)

BMP2
Bone morphogenetic protein 2 or BMP-2 belongs to the TGF-beta superfamily of proteins. BMP-2 like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. It is involved in
the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It is involved also in cardiac cell differentiation and epithelial to mesenchymal transition. BMP-2 and BMP-7 are osteoinductive BMPs: they have been demonstrated to potently induce osteoblast differentiation in a variety
of cell types.
Bone morphogenetic protein 2 is shown to stimulate the production of bone. Recombinant human protein (rhBMP-2) is currently available for orthopaedic usage in the United States. Implantation of BMP-2 in a collagen sponge induces new bone formation and can be used for the treatment of bony defects, delayed union, and non-union. Bone morphogenetic protein 2 has also found its way into the field of Dentistry. Oral and Maxillofacial Surgery and Implant Dentistry in particular have benefited dramatically from commercially available BMP-2. The use of dual tapered threaded fusion cages and recombinant human bone morphogenetic protein-2 on an absorbable collagen sponge obtained and maintained intervertebral spinal fusion, improved clinical outcomes, and reduced pain after anterior lumbar interbody arthrodesis in patients with degenerative lumbar disc disease. As an adjuvant to allograft bone or as a replacement for harvested autograft, bone
morphogenetic proteins (BMPs) appear to improve fusion rates after spinal arthrodesis in both animal models and humans, while reducing the donor-site morbidity previously associated with such procedures.
BMP2 = 819.094 Hz (F)

BMP7
Bone morphogenetic protein 7 or BMP7 (also known as osteogenic protein-1 or OP-1) is a protein that in humans is encoded by the BMP7 gene. Human recombinant BMP7 has surgical uses and is marketed under the brand name OP1 (sold by Olympus, who bought it from Stryker). It can be used to aid in the fusion of vertebral bodies to prevent neurologic trauma. Also in the treatment of tibial non-union, frequently in cases where a bone graft has failed. rhBMP-2 is much more widely used clinically because it helps grow
bone better than rhBMP-7 and other BMPs.
BMP7 also has the potential for treatment of chronic kidney disease. Kidney disease is characterized by derangement of the tubular architecture by both myofibroblast buildup and monocyte infiltration. Because endogenous BMP-7 is an inhibitor of the TGF-beta signaling cascade that induces fibrosis, the use of exogenous recombinant BMP-7

(rhBMP-7) could be a viable treatment of chronic kidney disease. It is also thought that BMP-7 reverses fibrosis and EMT through reduction in monocyte infiltration into inflamed
tissue. On a molecular level, BMP-7 represses inflammation by knocking down the expression of several pro-inflammatory cytokines produced by monocytes. Reducing this inflammatory stress, in turn, reduces the chance of fibrosis.
Regardless of the mechanism of fibrosis or the origin of myofibroblasts, exogenous BMP-7 has been shown to reverse the EMT process and trigger MET. Eventually this restores the healthy epithelial cell population, and normal function of the kidneys in mice. This is pertinent in humans as well, because many diseases stemming from organ fibrosis occur via the EMT process. The epithelial-menenchymal transition is also problematic in cancer metastasis, so the diminution of EMT with recombinant DNA could have great implications in future cancer treatment options.
BMP7 administration has been proposed as a possible treatment for human infertility due to poor response to FSH treatment. It was discovered that mice injected with BMP7 increased their production of "good" brown fat cells, while keeping their levels of the normal white fat cells constant. A BMP7 therapy for obesity in humans may be developed as a result.
BMP7 = 903.400 Hz (F)

BRCA
BRCA1 and BRCA are a human gene and its protein product, respectively. The official name (breast cancer 1, early onset). BRCA1 is a human tumor suppressor gene (to be specific, a caretaker gene), found in all humans; its protein, also called by the synonym breast cancer type 1 susceptibility protein, is responsible for repairing DNA.
BRCA1 and BRCA2 are normally expressed in the cells of breast and other tissue, where they help repair damaged DNA or destroy cells if DNA cannot be repaired. They are involved in the repair of chromosomal damage with an important role in the error-free repair of DNA double-strand breaks. If BRCA1 or BRCA2 itself is damaged by a BRCA mutation, damaged DNA is not repaired properly, and this increases the risk for breast cancer.
Research suggests that both the BRCA1 and BRCA2 proteins regulate the activity of other genes and play a critical role in embryo development. The BRCA1 protein probably interacts with many other proteins, including tumor suppressors and regulators of the cell division cycle. In addition to breast cancer, mutations in the BRCA1 gene also increase the risk of ovarian, fallopian tube, and prostate cancers. Moreover, precancerous lesions (dysplasia) within the Fallopian tube have been linked to BRCA1 gene mutations. Pathogenic
mutations anywhere in a model pathway containing BRCA1 and BRCA2 greatly increase risks for a subset of leukemias and lymphomas.
As women age, their reproductive performance declines leading to menopause. This decline is tied to a reduction in the number of ovarian follicles. Women with a germ-line BRCA1 mutation appear to have a diminished oocyte reserve and decreased fertility compared to normally aging women. Furthermore, women with an inherited BRCA1 mutation undergo menopause prematurely. Certain variations of the BRCA2 gene increase risks for breast cancer as part of a hereditary breast-ovarian cancer syndrome.

In addition to breast cancer in men and women, mutations in BRCA2 also lead to an increased risk of ovarian, Fallopian tube, prostate, and pancreatic cancers, as well as malignant melanoma.
BRCA1 = 514.769 Hz (F)
BRCA2 = 952.413 Hz (F)

CAT
Catalase is a common enzyme found in nearly all living organisms exposed to oxygen (such as vegetables, fruit or animals). It catalyzes the decomposition of hydrogen peroxide to water and oxygen. It is a very important enzyme in protecting the cell from oxidative damage by reactive oxygen species (ROS). Likewise, catalase has one of the highest turnover numbers of all enzymes; one catalase molecule can convert millions of molecules of hydrogen peroxide to water and oxygen each second.
Hydrogen peroxide is a harmful byproduct of many normal metabolic processes; to prevent damage to cells and tissues, it must be quickly converted into other, less dangerous substances. To this end, catalase is frequently used by cells to rapidly catalyze the decomposition of hydrogen peroxide into less-reactive gaseous oxygen and water molecules.
According to recent scientific studies, low levels of catalase may play a role in the graying process of human hair. Hydrogen peroxide is naturally produced by the body and catalase breaks it down. If catalase levels decline, hydrogen peroxide cannot be broken down as well. This allows the hydrogen peroxide to bleach the hair from the inside out. This finding may someday be incorporated into cosmetic treatments for graying hair.
CAT = 402.690 Hz (E)

CCR5
C-C chemokine receptor type 5, also known as CCR5 or CD195, is a protein on the surface of white blood cells that is involved in the immune system as it acts as a receptor for chemokines. This is the process by which T cells are attracted to specific tissue and organ targets. Many forms of HIV, the virus that causes AIDS, initially use CCR5 to enter and infect host cells. Certain populations have inherited the Delta 32 mutation resulting in the genetic deletion of a portion of the CCR5 gene. Homozygous carriers of this mutation are resistant to M-tropic strains of HIV-1 infection. A genetic approach involving intrabodies that block CCR5 expression has been proposed as a treatment for HIV-1 infected individuals.
CCR5 = 742.520 Hz (F)

CD28
CD28 (Cluster of Differentiation 28) is one of the proteins expressed on T cells that provide co-stimulatory signals, which are required for their activation. When activated by Toll-like receptor ligands, the CD80 expression is upregulated in antigen presenting cells (APCs). The CD86 expression on antigen presenting cells is constitutive. CD28 is the only B7 receptor constitutively expressed on naive T cells. Stimulation through CD28 in addition to the T-cell receptor (TCR) can provide a potent co-stimulatory signal to T cells for the

production of various interleukins (IL-6 in particular). CD28 has also been found to stimulate eosinophil granulocytes where its ligation with anti-CD28 leads to the release of IL-2, IL4, IL-13 and IFN-gamma.
The T helper cells (Th cells) are a type of T cell that play an important role in the immune system, particularly in the adaptive immune system. They help the activity of other immune cells by releasing T cell cytokines. They are essential in B cell antibody class switching, in the activation and growth of cytotoxic T cells, and in maximizing bactericidal activity of phagocytes such as macrophages. CD28 plays an important role in decreasing the risk of T cell auto-immunity against host antigens.
CD28 = 459.366 Hz (F)

CD4
In molecular biology, CD4 (cluster of differentiation 4) is a glycoprotein found on the surface of immune cells such as T helper cells, monocytes, macrophages, and dendritic cells. It was discovered in the late 1970s and was originally known as leu-3 and T4. In humans, the CD4 protein is encoded by the CD4 gene. CD4+ T helper cells are white blood cells that are an essential part of the human immune system. They are often referred to as CD4 cells, T-helper cells or T4 cells. They are called helper cells because one of their main roles is to send signals to other types of immune cells, including CD8 killer cells. CD4 cells send the signal and CD8 cells destroy the infectious particle. If CD4 cells become depleted, for example in untreated HIV infection, or following immune suppression prior to a transplant, the body is left vulnerable to a wide range of infections that it would otherwise have been able to fight.
HIV-1 uses CD4 to gain entry into host T-cells and achieves this through its viral envelope protein known as gp120. The binding to CD4 creates a shift in the conformation of gp120 allowing HIV-1 to bind to a co-receptor expressed on the host cell. These co-receptors are chemokine receptors CCR5 or CXCR4. Following a structural change in another viral protein (gp41), HIV inserts a fusion peptide into the host cell that allows the outer membrane of the virus to fuse with the cell membrane. HIV infection leads to a progressive reduction in the number of T cells expressing CD4. CD4 continues to be expressed in most neoplasms derived from T helper cells. It is therefore possible to use CD4 immunohistochemistry on tissue biopsy samples to identify most forms of peripheral T cell lymphoma and related malignant conditions. The antigen has also been associated with a number of autoimmune diseases such as vitiligo and type I diabetes mellitus.

CD8
CD8 (cluster of differentiation 8) is a transmembrane glycoprotein that serves as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to a major histocompatibility complex (MHC) molecule, but is specific for the class I MHC protein. There are two isoforms of the protein, alpha and beta, each encoded by a different gene. The CD8 co-receptor is predominantly expressed on the surface of cytotoxic T cells, but can also be found on natural killer cells, cortical thymocytes, and dendritic cells. It is expressed in T cell lymphoblastic lymphoma and hypo-pigmented mycosis fungoides, but is frequently lost in other T-cell neoplasms.
CD8+ T cells are critically important in the immune response to HIV. These cells attack

and kill infected cells that are producing virus. CD8+ T cells are pivotal for the recognition and clearance of cells infected by intracellular pathogens1 and are the key players in antitumor immune response. However, this interaction is low-affinity and requires a large number of TCR ‘hits’ so in the majority of cases the stimulation via TCR alone is unable to sustain optimal activation of naive and memory CD8+ T cells. Therefore a second (co-stimulatory) signal is generally indispensable for their full activation and survival. The best defined (but not the sole) co-stimulus is provided by the interaction of CD28 (on the surface of the T cell) and CD86 or CD80 (on the surface of the pAPC).
CD8A = 471.514 Hz (E)
CD8B = 434.822 Hz (F)

CFTR
Cystic fibrosis transmembrane conductance regulator (CFTR) is a protein that in humans is encoded by the CFTR gene. CFTR is an ABC transporter-class ion channel that transports chloride and thiocyanate ions across epithelial cell membranes. Mutations of the CFTR gene affect functioning of the chloride ion channels in these cell membranes, leading to cystic fibrosis and congenital absence of the vas deferens. Well over one thousand mutations have been described that can affect the CFTR gene. Such mutations can cause two genetic disorders, congenital bilateral absence of vas deferens and the more widely known disorder cystic fibrosis. Both disorders arise from the blockage of the movement of ions and, therefore, water into and out of cells. In congenital bilateral absence of vas deferens, the protein may be still functional but not at normal efficiency, this leads to the production of thick mucus, which blocks the developing vas deferens. In people with mutations giving rise to cystic fibrosis, the blockage in ion transport occurs in epithelial cells that line the passageways of the lungs, pancreas, and other organs. This leads to chronic dysfunction, disability, and a reduced life expectancy.
CFTR = 416.855 Hz (F)

CN
Calcineurin (CN) is a protein phosphatase also known as protein phosphatase 3, and calcium-dependent serine-threonine phosphatase. This enzyme has several important purposes in the human body. Calcineurin can assist in the immune response by activating the immune cells known as T cells. It may also play a role in regulating working memory and attention due to its effects on certain brain receptors. In diabetics, it can cause pancreatic cells to function properly.
Studies have shown that the calcineurin and NFATc system is involved in lung development and function. This same system has also been found to assist in the expression of genes involved in heart valve development. In the heart, calcineurin is only seen to be activated on the days that the heart valve forms. In adults, this enzyme can still affect the heart. During periods of stress in development, heart cells grow larger in a condition known
as hypertrophy. An overabundance of a deficient form of it causes this effect to carry over into adulthood. When this effect occurs in a person with hypertension, it can be quite dangerous. Calcineurin is associated to muscle fibre type switching and variations

in endurance phenotype traits. It is activated by PPP3CA, PPP3CB, PPP3CC, and regulated by PPP3R1, PPP3R2.
PPP3CA = 395.390 Hz (G)
PPP3CB = 398.322 Hz (A)
PPP3CC = 399.331 Hz (A)
PPP3R1 = 960.373 Hz (A)
PPP3R2 = 987.915 Hz (D)

CRH
Corticotropin-releasing hormone (CRH) also known as corticotropin-releasing factor (CRF) or corticoliberin is a peptide hormone and neurotransmitter involved in the stress response. It belongs to corticotropin-releasing factor family. In humans, it is encoded by the CRH gene. In the short term, CRH can suppress appetite, increase subjective feelings of anxiety, and perform other functions like boosting attention. Although the distal action of CRH is immunosuppression via the action of cortisol, CRH itself can actually heighten inflammation, a process being investigated in multiple sclerosis research.
Abnormally high levels of CRH have been found in the cerebrospinal fluid of people that have committed suicide. Recent research has linked the activation of the CRH1 receptor with the euphoric feelings that accompany alcohol consumption. CRH is also synthesized by the placenta and seems to determine the duration of pregnancy. Levels rise towards the end of pregnancy just before birth. In culture, trophoblast CRH is inhibited by progesterone.
Corticotropin-releasing hormone receptor 1 (CRHR1 or CRH1) is a protein, also known as CRF1. In humans, CRF1 is encoded by the CRHR1 gene. The corticotropin-releasing hormone receptor binds to corticotropin-releasing hormone, a potent mediator of endocrine, autonomic, behavioral, and immune responses to stress.
CRF1 receptors in mice mediate ethanol enhancement of GABAergic synaptic transmission. Variations in the CRHR1 gene is associated with enhanced response to inhaled corticosteroid therapy in asthma. CRF1 triggers cells to release hormones that are linked to stress and anxiety. Hence CRF1 receptor antagonists are being actively studied as possible treatments for depression and anxiety.
CRH = 392.478 Hz (F)
CRH1 = 929.414 Hz (F)

CRY1
Cryptochromes are a class of flavoproteins that are sensitive to blue light. They are found in plants and animals. Cryptochromes are involved in the circadian rhythms of plants and animals, and in the sensing of magnetic fields in a number of species. There is consistent evidence of an influence of geomagnetic fields on the light sensitivity of the human visual system. Moreover, it has been proposed recently that light-sensitive magnetic responses are not only used for directional information, but may also aid visual spatial perception in mammals, by providing a spherical coordinate system for integrating spatial position.
Data suggest that clock genes Per1, Cry1, Clock, and Bmal1 and their protein products may be directly involved in the daytime-dependent regulation and adaptation of

hormone synthesis. Reduced cry1 expression is associated with glioma. Loss of Cry1 expression is associated with skin tumors. Genetic variants of CRY1 associate with depressive disorder
CRY1 = 447.430 Hz (D)

CRY2
Cryptochromes are a class of flavoproteins that are sensitive to blue light. They are found in plants and animals. Cryptochromes are involved in the circadian rhythms of plants and animals, and in the sensing of magnetic fields in a number of species. There is consistent evidence of an influence of geomagnetic fields on the light sensitivity of the human visual system. Moreover, it has been proposed recently that light-sensitive magnetic responses are not only used for directional information, but may also aid visual spatial perception in mammals, by providing a spherical coordinate system for integrating spatial position.
The expression of BMAL1, PER3, PPARD and CRY2 genes is altered in gestational diabetes compared to normal pregnant women. deranged expression of clock genes may play a pathogenic role in GDM. Reduced cry2 expression is associated with glioma. Genetic variants of CRY2 associate with seasonal affective disorder or winter depression. The associations of GLIS3-rs7034200 and CRY2-rs11605924 with fasting glucose, beta cell function, and type 2 diabetes. Human CRY2 has the molecular capability to function as a light-sensitive magnetosensor. CRY2 gene variation was associated with bipolar disorder. Data suggest that CRY2 locus is associated with vulnerability for depression. Findings suggest a role for CRY2 in breast tumorigenesis.
CRY2 = 408.324 Hz (F)

CXCR4
C-X-C chemokine receptor type 4 (CXCR-4) also known as fusin or CD184 is a protein that in humans is encoded by the CXCR4 gene. CXCR-4 is an alpha-chemokine receptor specific for stromal-derived-factor-1 (SDF-1 also called CXCL12), a molecule endowed with potent chemotactic activity for lymphocytes. CXCR4 is one of several chemokine receptors that HIV can use to infect CD4+ T cells. CXCR4 is upregulated during the implantation window in natural and hormone replacement therapy cycles in the endometrium, producing, in presence of a human blastocyst.
CXCR4 is present in newly generated neurons during embryogenesis and adult life where it plays a role in neuronal guidance. The levels of the receptor decrease as neurons mature. This has been implicated in disorders such as epilepsy. Drugs that block the CXCR4 receptor appear to be capable of "mobilizing" hematopoietic stem cells into the bloodstream as peripheral blood stem cells. It has been associated with WHIM syndrome. WHIM like mutations in CXCR4 were recently identified in patients with Waldenstrom's
Macroglobulinemia, a B-cell malignancy. While CXCR4’s expression is low or absent in many healthy tissues, it was demonstrated to be expressed in over 23 types of cancer, including breast cancer, ovarian cancer, melanoma, and prostate cancer. Expression of this receptor in cancer cells has been linked to
metastasis to tissues containing a high concentration of CXCL12, such as lungs, liver and bone marrow.

Chronic exposure to THC increased T lymphocyte CXCR4 expression on both CD4+ and CD8+ T lymphocytes.
CXCR4 = 728.131 Hz (F)

DSG4
Desmoglein-4 is a protein that in humans is encoded by the DSG4 gene. This gene encodes a member of the desmoglein subgroup of desmosomal cadherins. The encoded protein is a transmembrane component in desmosomes and may play a role in cell-cell adhesion in epithelial cells. Mutations in the gene are associated with localized autosomal recessive hypotrichosis and potentially in other skin disorders. DSG4 is a component of intercellular desmosome junctions. Involved in the interaction of plaque proteins and intermediate
filaments mediating cell-cell adhesion. Coordinates the transition from proliferation to differentiation in hair follicle keratinocytes (by similarity).
DSG4 = 766.485 Hz (F)

EPO
Erythropoietin, also known as EPO, is a glycoprotein hormone that controls erythropoiesis, or red blood cell production. Erythropoietin has a range of actions including vasoconstriction-dependent hypertension, stimulating angiogenesis, and inducing proliferation of smooth muscle fibers. It can increase iron absorption by suppressing the hormone hepcidin. EPO also affects neuronal protection during hypoxic conditions (stroke, etc.). Trials on human subjects are not yet reported; if proven to be a viable treatment of heart attack and stroke patients, it could improve the outcome and quality of life. The reasoning behind such a proposal is that EPO levels of 100 times the baseline have been detected in brain tissue as a natural response to (primarily) hypoxic damage.
Multiple studies have suggested that EPO improves memory. This effect is independent of its effect on hematocrit. Rather, it is associated with an increase in hippocampal response and effects on synaptic connectivity, neuronal plasticity, and memory-related neural networks. EPO may also be an effective treatment for depression. The overall oxygen delivery system (blood oxygen levels, as well as heart stroke volume, vascularization, and lung function) is one of the major limiting factors to muscles' ability to perform endurance exercise. EPO can increase peak oxygen uptake making it useful for endurance sports.
EPO = 390.307 Hz (G)

ESR1
Estrogen receptor alpha (ESR-1), also known as NR3A1 (nuclear receptor subfamily 3, group A, member 1), is one of two main types of estrogen receptor, a nuclear receptor that is activated by the sex hormone estrogen. In humans, ESR-1 is encoded by the gene ESR1 (Estrogen Receptor 1). The ESR1 is found in endometrium, breast cancer cells, ovarian stroma cells and in the hypothalamus. ESR's bind estrogen and functions to activate genes involved in a variety of biological processes. Two forms of the ER, ER alpha and ER beta, are encoded by independent genes, and each plays different roles in gene regulation. Additional variants of ER beta have also been reported; these

include ERb2, ERb3, ERb4, and ERb5. All forms of the ER have the ability to heterodimerize with each other.
Differences in localization and concentrations as well as heterodimerization among the variants may serve to achieve distinct cell and tissue responses. ER alpha generally functions as an activator of transcription while ER beta functions as a repressor.
Selective activation of ERS1 is anxiogenic and depressant, whereas selective activation of ERS2 is anxiolytic and antidepressant. Estrogens, acting through its two receptors have diverse physiological effects in the reproductive system, bone, cardiovascular system, hematopoiesis, and central and peripheral nervous systems. Genetic variations in ESR1 are correlated with bone mineral density (BMD). Low BMD is a risk factor for osteoporotic fracture. Osteoporosis is characterized by reduced bone mineral density, disrutption of bone microarchitecture, and the alteration of the amount and variety of non-collagenous proteins in bone. Osteoporotic bones are more at risk of fracture.
ESR1 = 446.140 Hz (F)

ESR2
Estrogen receptor beta (ESR-2), also known as NR3A2 (nuclear receptor subfamily 3, group A, member 2), is one of two main types of estrogen receptor, a nuclear receptor which is activated by the sex hormone estrogen. In humans, ESR-2 is encoded by the ESR2 gene. The expression of the ER2 protein has been documented in kidney, brain, bone, heart, lungs, intestinal mucosa, prostate, and endothelial cells.
ER's bind estrogen and functions to activate genes involved in a variety of biological processes. Two forms of the ER, ER alpha and ER beta, are encoded by independent genes, and each plays different roles in gene regulation. Additional variants of ER beta have also been reported; these include ERb2, ERb3, ERb4, and ERb5. All forms of the ER have the ability to heterodimerize with each other. Differences in localization and concentrations as well as heterodimerization among the variants may serve to achieve distinct cell and tissue responses. ER alpha generally functions as an activator of transcription while ER beta functions as a repressor.
Selective activation of ER1 is anxiogenic and depressant, whereas selective activation of ER2 is anxiolytic and antidepressant. Estrogens, acting through its two receptors have diverse physiological effects in the reproductive system, bone, cardiovascular system, hematopoiesis, and central and peripheral nervous systems.
ESR2 = 398.974 Hz (F)

FLG
Filaggrin (FLG) is a filament-associated protein that binds to keratin fibers in epithelial cells. Filaggrin is essential for the regulation of epidermal homeostasis. Within the stratum corneum, filaggrin monomers can become incorporated into the lipid envelope, which is responsible for the skin barrier function. Alternatively, these proteins can interact with keratin intermediate filaments. Filaggrin undergoes further processing in the upper stratum corneum to release free amino acids that assist in water retention. Individuals with truncation mutations in the gene coding for filaggrin are strongly predisposed to a severe form of dry skin, ichthyosis vulgaris, and/or eczema. Autoantibodies in rheumatoid arthritis recognizing an epitope of citrullinated peptides are cross-reactive with filaggrin. The barrier defect seen in filaggrin null carriers also

appears to lead to increased asthma susceptibility and exacerbations. Filaggrin deficiency is one of the top genome-wide genetic determinants of asthma, along with the variants found that regulate ORMDL3 expression.
The penetrance of filaggrin mutations may be increased by household exposure to cats.
FLG = 397.026 Hz (D)

FOXC2
Forkhead box protein C2 (FOXC2) also known as forkhead-related protein FKHL14 (FKHL14), transcription factor FKH-14, or mesenchyme fork head protein 1 (MFH1) is a protein that in humans is encoded by the FOXC2 gene. FOXC2 is a member of the fork head box (FOX) family of transcription factors. Absence of FOXC2 has been shown to lead to the failure of lymphatic valves to form and problems with lymphatic remodelling. A number of mutations in the FOXC2 gene have been associated with Lymphedema–distichiasis syndrome, It has also been suggested that there may be a link between polymorphisms in FOXC2 and varicose veins.
FOXC2 is also involved in cancer metastases. In particular, expression of FOXC2 is induced when epithelial cells undergo an epithelial-mesenchymal transition (EMT) and become mesenchymal looking cells. EMT can be induced by a number of genes including Snail, Twist, Goosecoid, and TGF-beta 1. Overexpression of FOXC2 has been noted in subtypes of breast cancer which are highly metastatic. Suppression of FOXC2 expression using shRNA in a highly metastatic breast cancer model blocks their metastatic ability.
FOXC2 counteracts obesity, hypertriglyceridemia, and diet-induced insulin resistance, it also regulates osteogenesis and angiogenesis of bone marrow mesenchymal stem cells, controls Ang-2 expression and modulates angiogenesis, vascular patterning, remodeling, and functions in adipose tissue (inducible brown fat).
FOXC2 = 984.205 Hz (D)

FSHB
Follitropin subunit beta also known as follicle-stimulating hormone beta subunit (FSH-B) is a protein that in humans is encoded by the FSHB gene. The pituitary glycoprotein hormone family includes follicle-stimulating hormone, luteinizing hormone, chorionic gonadotropin, and thyroid-stimulating hormone. All of these glycoproteins consist of an identical alpha subunit and a hormone-specific beta subunit. This gene encodes the beta subunit of follicle-stimulating hormone. In conjunction with luteinizing hormone (LH), follicle-stimulating hormone induces egg and sperm production.
FSH-B = 731.939 Hz (F)

GDF8
Myostatin (also known as growth differentiation factor 8, abbreviated GDF-8) is a protein that in humans is encoded by the MSTN gene. Myostatin is a secreted growth differentiation factor that is a member of the TGF beta protein family that inhibits muscle differentiation and growth in the process known as myogenesis. Myostatin is produced primarily in skeletal muscle cells, circulates in the blood and acts on muscle tissue, by binding a cell-bound receptor called the activin type II receptor (ACVR2B).
Mutations in both copies of the human myostatin gene results in individuals that have

significantly more muscle mass and hence are considerably stronger than normal. Furthermore, blocking the activity of myostatin may have therapeutic application in treating muscle wasting diseases such as muscular dystrophy.
GDF8 = 783.007 Hz (F)

GH
Growth hormone (GH or HGH), also known as somatotropin or somatropin, is a peptide hormone that stimulates growth, cell reproduction and regeneration in humans and other animals. The benefits provided by Somatropin include but are not limited to: Muscle Growth. Increased Fat Burning. A Leaner and Tighter Physique. Increase Recovery Time. Healthier Skin. Age Reduction (staving off the effects of age). Muscle, Joint and Bone Repair. Decreases Stress. Improved Focus & Clarity of Thought. Increased Energy.
While most of the effects somatropin has on the body are beneficial, negative side effects are possible. The effects may vary greatly from person to person. Digestive side effects include constipation, diarrhea, indigestion, nausea, vomiting, abdominal pain or cramping, bloating, urinary changes, loss of appetite and rapid weight gain. Respiratory and cardiovascular effects include shortness of breath, dizziness, lightheadedness, irregular heartbeat and chest tightness. Other side effects include bone growth, water retention, Carpal Tunnel, insomnia, fatigue, sore throat, congestion, back pain, muscle stiffness, itching, dry mouth and odd sensations such as tingling or numbness in the hands, feet, arms, legs and other parts of the body.
GH-1 = 455.024 (G)
GH-2 = 457.915 (placenta) (F)

GHIH
Somatostatin (also known as growth hormone-inhibiting hormone (GHIH) or somatotropin release-inhibiting factor (SRIF)) or somatotropin release-inhibiting hormone is a peptide hormone that regulates the endocrine system and affects neurotransmission and cell proliferation via interaction with G protein-coupled somatostatin receptors and inhibition of the release of numerous secondary hormones. Somatostatin regulates insulin and glucagon. Somatostatin is classified as an inhibitory hormone, whose actions are spread to different parts of the body:
- Anterior pituitary. In the anterior pituitary gland, the effects of somatostatin are: Inhibit the release of growth hormone (GH) (thus opposing the effects of Growth Hormone-Releasing Hormone (GHRH)). Inhibit the release of thyroid-stimulating hormone (TSH). It is induced by low pH. Inhibit adenylyl cyclase in parietal cells. Inhibits the release of prolactin (PRL)
- Gastrointestinal system. Somatostatin is homologous with cortistatin (see somatostatin family) and suppresses the release of gastrointestinal hormones Gastrin, Cholecystokinin (CCK), Secretin, Motilin, Vasoactive intestinal peptide (VIP), Gastric inhibitory polypeptide (GIP), Enteroglucagon. Decrease rate of gastric emptying, and reduces smooth muscle contractions and blood flow within the intestine. Suppresses the release of pancreatic hormones. Inhibits insulin release when somatostatin is released from delta cells of pancreas. Inhibits the release of glucagon. Suppresses the exocrine secretory action of pancreas.

GHIH = 634.010 Hz (F)

GHRH
Growth-hormone-releasing hormone (GHRH), also known as growth-hormone-releasing factor (GRF, GHRF), somatoliberin or somatocrinin, is a releasing hormone for growth hormone. GHRH is a hypothalamic hormone that is essential for normal expansion of the somatotrope lineage during pituitary development. GHRH is produced by GHRH cells in the hypothalamus and reaches the adenohypophysis via the portal system. It stimulates the release of GH (Growth Hormone)/Somatotropin from the adenohypophysis. GH is required for normal postnatal growth, having a critical role in bone growth as well as important regulatory effects on protein, carbohydrate, and lipid metabolism.
GHRH is essential for expansion of the somatotrope lineage during pituitary development, but excessive GHRH secretion and/or action results in unregulated somatotrope proliferation leading to hyperplasia and neoplastic transformation. Likewise, a decrease in GHRH production or actions is associated with somatotrope hypoplasia. If the hypothalamus does not make enough GHRH, or if the pituitary gland does not have GH to release, GHD (Growth Hormone Deficiency) can occur. GH released by GHRH, stimulates liver
IGF1 gene transcription and could directly stimulate tumor IGF1 production. GH-induced increase in IGF1 can activate type-I IGF1 receptors located on tumor cells, thereby mediating the transcription of genes important for cell proliferation and have been linked with malignant transformation, tumor progression, and metastasis of various cancers. It is of importance that the endogenous production of GHRH was detected in human SCLC (Small-Cell Lung Carcinoma), sarcoma cell lines, and the prostate, ovarian and the endometrial cancers.
Thus, antagonistic analogs of GHRH could be useful for the treatment of endocrine disorders such as
acromegaly, diabetic retinopathy, or diabetic nephropathy, but their main applications are likely to be in cancer therapy. Biological effects of its expression stimulate both GH and IGF-1 production, increase bodyweight , muscle development, lifespan, and quality of life.
GHRH = 620.114 Hz (F)

GHRHR
The growth-hormone-releasing hormone receptor (GHRHR) is a G-protein-coupled receptor that binds growth hormone-releasing hormone. The GHRHR activates a Gs protein that causes a cascade of cAMP via Adenylate cyclase. This gene, expressed in the pituitary, encodes a receptor for growth-hormone-releasing hormone. Binding of this hormone to the receptor leads to synthesis and release of growth hormone. Mutations in this gene have been associated with isolated growth-hormone deficiency (IGHD), also known as Dwarfism of Sindh, a disorder characterized by short stature.
GHRHR = 868.226 Hz (F)

HCG
Human chorionic gonadotropin (hCG) is a hormone produced by the

syncytiotrophoblast, a component of the fertilized egg, after conception. Following implantation, the syncytiotrophoblast gives rise to the placenta. The pituitary analog of hCG, known as luteinizing hormone (LH), is produced in the pituitary gland of males and females of all ages. Human chorionic gonadotropin interacts with the LHCG receptor of the blastocyst and promotes the maintenance of the corpus luteum during the beginning of pregnancy. This allows the corpus luteum to secrete the hormone progesterone during the first trimester.
It is heterodimeric, with an alpha subunit identical to that of luteinizing hormone (LH), follicle-stimulating hormone (FSH), thyroid-stimulating hormone (TSH), and beta subunit that is unique to hCG. The two subunits create a small hydrophobic core surrounded by a high surface area-to-volume ratio: 2.8 times that of a sphere. The vast majority of the outer amino acids are hydrophilic.
Human chorionic gonadotropin (HCG) is a hormone that supports the normal development of an egg in a woman's ovary, and stimulates the release of the egg during ovulation. HCG is used to cause ovulation and to treat infertility in women, and to increase sperm count in men. HCG is also used in young boys when their testicles have not dropped down into the scrotum normally. This can be caused by a pituitary gland disorder.
hCG-alpha = 651.295 Hz + hCG-beta = 883.377 Hz (F)

HFE
Human hemochromatosis protein also known as the HFE protein is a protein which in humans is encoded by the HFE gene. It is thought that this protein functions to regulate iron absorption by regulating the interaction of the transferrin receptor with transferrin. The iron storage disorder hereditary hemochromatosis (HHC) is an autosomal recessive genetic disorder that usually results from defects in this gene.
HFE = 734.604 Hz (F)

HGD
Homogentisate 1,2-dioxygenase (homogentisic acid oxidase, homogentisicase) is an enzyme, which catalyzes the conversion of homogentisate to 4-maleylacetoacetate. Homogentisate 1,2-dioxygenase or HGD is involved in the catabolism of aromatic rings, more specifically in the breakdown of the amino acids tyrosine and phenylalanine. HGD appears in the metabolic pathway of tyrosine and phenylalanine degradation once the molecule homogentisate is produced. Homogentisate reacts with HGD to produce maleylacetoacetate, which then is further used in the metabolic pathway. HGD requires the use of Fe^{2+} and O_2 in order to cleave
the aromatic ring of homogentisate.
Homegentisate 1,2 dioxygenase is involved in a type of metabolic diseases, called alkaptonuria. This disorder is due to the inability of the body to deal with homogentisate, which when oxidized by the body will produce the compound known as the ochronotic pigment, which causes a black color, and has several negative effects. The first of these effects is that the patient’s earwax will begin to turn black or red, depends on the patient’s diet, since the blood becomes oxidized and thus turns black due to excess of the ochronotic pigment. The other effect of the ochronotic pigment is that it can accumulate in the body’s connective tissue leading to degenerative arthritis, as the

person grows older. Alkaptonuria has another effect in that it can cause the urine to turn black as well if let to sit for long enough to become oxidized.
HGD = 915.173 Hz (E)

HSP90B1
Heat shock protein 90kDa beta member 1 (HSP90B1), known also as endoplasmin, gp96, grp94 and ERp99, is a chaperone protein that in humans is encoded by the HSP90B1 gene. HSP90B1 is an HSP90 paralogue that is found in the endoplasmic reticulum. It plays critical roles in maintaining protein homeostasis in the secretory pathway. . It has been implicated as an essential immune chaperone to regulate both innate and adaptive immunity.
HSP90B1 = 622.703 Hz (D)

IGF1
Insulin-like growth factor 1 (IGF-1), also called somatomedin C, is a protein that in humans is encoded by the IGF1 gene. IGF-1 has also been referred to as a "sulfation factor" and its effects were termed "nonsuppressible insulin-like activity" (NSILA) in the 1970s. IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin, is used for the treatment of growth failure. IGF-1 is a primary mediator of the effects of growth hormone (GH). Growth hormone is made in the anterior pituitary gland, is released into the blood stream, and then stimulates the liver to produce IGF-1. IGF-1 then stimulates systemic body growth, and has growth-promoting effects on almost every cell in the body, especially skeletal muscle, cartilage, bone, liver, kidney, nerves, skin, hematopoietic cell, and lungs. In addition to the insulin-like effects, IGF-1 can also regulate cell growth and development, especially in nerve cells, as well as cellular DNA synthesis. Fasting, including intermittent fasting, can reduce IGF-1 levels rapidly and dramatically. IGF-1 has also been shown to be effective in animal models of stroke when combined with Erythropoietin. Both behavioural and cellular improvements were found.
IGF1 = 848.308 Hz (G)

IL1
The Interleukin 1 family (IL-1 family) is a group of 11 cytokines, which plays a central role in the regulation of immune and inflammatory responses to infections or sterile insults. Interleukin-1 alpha (IL-1A) is a protein of the interleukin-1 family that in humans is encoded by the IL1A gene. In general, Interleukin 1 is responsible for the production of inflammation, as well as the promotion of fever and sepsis. The essential role of IL-1A in
maintenance of skin barrier function, especially with increasing age, is an additional explanation of its constitutive production in epidermis.
Interleukin-1 beta (IL-1B) also known as catabolin, is a cytokine protein that in humans is encoded by the IL1B gene. IL-1B precursor is cleaved by caspase 1 (interleukin 1 beta convertase). Cytosolic thiol protease cleaves the product to form mature IL-1B.
The interleukin-1 receptor antagonist (IL-1RA or IL-1RN) is a protein that in humans is encoded by the IL1RN gene. IL-1RN was initially called the IL-1 inhibitor. IL-1RN, is an

agent that binds non-productively to the cell surface interleukin-1 receptor (IL-1R). IL-1R is the same receptor that binds interleukin 1 (IL-1). Hence IL-1RN prevents IL-1 from sending a signal to that cell. A polymorphism of IL1RN gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. Mutations in the IL1RN gene results in a rare disease called deficiency of the interleukin-1–receptor antagonist (DIRA). Variants of the IL1RN gene are also associated with risk of schizophrenia. Elevated levels of IL1RN has been found in serum of schizophrenia patients.
IL1A = 560.425 Hz (F)
IL1B = 562.921 Hz (E)
IL1RN = 890.450 Hz (F)

IL2
Interleukin 2 (IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system. It is a protein that regulates the activities of white blood cells (leukocytes, often lymphocytes) that are responsible for immunity. IL-2 is part of the body's natural response to microbial infection, and in discriminating between foreign ("non-self") and "self". It stimulates the immune system and can lead to large increases in the number of CD4+ (T-helper) cells. IL-2 mediates its effects by binding to IL-2 receptors, which are expressed by lymphocytes.
IL2 = 877.748 Hz (F)

IL6
Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-inflammatory myokine. In humans, it is encoded by the IL6 gene. Interleukin-6 is known by many other names, including interferon-B2, cytotoxic T-cell differentiation factor, and B-cell stimulatory factor-2, among others. It is also classified as a monomer, meaning that it belongs to a group of organic compounds that can bond with similar molecules to form polymers. Specifically, interleukin-6 is a monomer of 184 amino acids secreted by these specialized cells. This release occurs at a single gene site known as 7p21.
Interleukin-6 plays an important role in regulating cell growth as well as immune functioning. In fact, its release is triggered by tissue damage or infection. Receptor sites are found on the surface of numerous cells throughout the body. From these sites, interleukin-6 transports a variety of proteins through the three major signal transduction pathways: protein kinase C, cAMP/protein kinase A, and calcium release. Each interleukin-6 molecule performs a specific action, depending on the cell that initiated its release.
The circulation of interleukin-6 stimulates the immune system by promoting what is known as the acute-phase reaction. This process encourages the production and release of acute-phase proteins, which behave as generic antibodies. In particular, the release of c-reactive protein increases phagocytosis, the process by which certain cells surround and neutralize invading bacteria and other pathogens. This results in an acute-phase response, such as fever. This is due to increased energy distribution in muscle and fatty tissue, which causes body temperature to rise. Interleukin-6 is also known as a myokine, a type of cytokine triggered by muscle contraction and then discharged into the bloodstream. This exchange promotes a variety of biologic actions.

For one thing, it increases the breakdown of fats. It also improves insulin resistance, resulting in better uptake and utilization of glucose. Therefore, interleukin-6 therapy may have an application in treating certain conditions, such as obesity and diabetes type II. While interleukin-6 is vital for optimum immune functioning, the downside is having too much of a good thing. Impaired or uncontrolled interleukin-6 gene expression can produce unwanted immune responses and lead to a variety of diseases, including autoimmune disorders. Patients with rheumatoid arthritis, for example, typically have elevated levels of interleukin-6 in their synovial
tissue.
IL-6 = 434.409 Hz (F)

INS
Insulin is a peptide hormone, produced by beta cells in the pancreas, and is central to regulating carbohydrate and fat metabolism in the body. It causes cells in the skeletal muscles, and fat tissue to absorb glucose from the blood. Insulin stops the use of fat as an energy source by inhibiting the release of glucagon. Except in the presence of the metabolic disorder diabetes mellitus and metabolic syndrome, insulin is provided within the body in a constant proportion to remove excess glucose from the blood, which otherwise would be toxic.
The actions of insulin on the global human metabolism level include:
Control of cellular intake of certain substances, most prominently glucose in muscle and adipose tissue (about two-thirds of body cells).
Increase of DNA replication and protein synthesis via control of amino acid uptake.
Modification of the activity of numerous enzymes.
The actions of insulin (indirect and direct) on cells include:
Increased glycogen synthesis. Increased lipid synthesis. Increased esterification of fatty acids. Decreased proteolysis – decreasing the breakdown of protein. Decreased lipolysis – forces reduction in conversion of fat cell lipid stores into blood fatty acids; lack of insulin causes the reverse. Decreased gluconeogenesis. Decreased autophagy. Increased amino acid uptake. Increased potassium uptake. Arterial muscle tone. Increase in the secretion of hydrochloric acid by parietal cells in the stomach. Decreased renal sodium
excretion. Insulin also influences other body functions, such as vascular compliance and cognition. Once insulin enters the human brain, it enhances learning and memory and benefits verbal memory in particular. Enhancing brain insulin signaling by means of intranasal insulin administration also enhances the acute thermoregulatory and glucoregulatory response to food intake, suggesting that central nervous insulin contributes to the control of whole-body energy homeostasis in humans. Insulin also has stimulatory effects on gonadotropin-releasing hormone from the hypothalamus, thus favoring fertility.
Although other cells can use other fuels (most prominently fatty acids), neurons depend on glucose as a source of energy in the nonstarving human. They do not require insulin to absorb glucose, unlike muscle and adipose tissue, and they have very small internal stores of glycogen. Sufficient lack of glucose and scarcity of these sources of glucose can dramatically make itself manifest in the impaired functioning of the central nervous system: dizziness, speech problems, and even loss of consciousness. Low blood

glucose level is known as hypoglycemia.
Several conditions in which insulin disturbance is pathologic: Diabetes mellitus (Types 1 and 2), other typs of impaired glucose tolerance, Insulinoma, Metabolic syndrome, and Polycystic ovary syndrome.
INS = 596.388 Hz (E)

KLF4
Kruppel-like factor 4 is a protein that in humans is encoded by the KLF4 gene. In embryonic stem cells (ESCs), KLF4 has been demonstrated to be a good indicator of stem-like capacity. It is suggested that the same is true in mesenchymal stem cells (MSCs). Endothelial Kruppel-like factor 4 is induced by pro-inflammatory stimuli and shear stress. Overexpression of Kruppel-like factor 4 induces expression of multiple anti-inflammatory and anti-thrombotic factors including endothelial nitric-oxide synthase and thrombomodulin, whereas knockdown of Kruppellike factor 4 leads to enhancement of tumor necrosis factor alpha-induced vascular cell adhesion molecule-1 and tissue factor expression.
Inflammatory cytokines and the biomechanical effects of LSS are the most potent effectors of endothelial homeostasis. Perturbation of endothelial function by pro-inflammatory cytokines or non-laminar flow has been documented in most vascular disease states, including vasculitis, aneurysm formation, pathological thrombosis, and atherosclerosis. KLF4 inhibits expression of key inflammatory mediators such as TF and VCAM-1 and enhances expression of factors responsible for functionally “healthy” endothelium, i.e. eNOS and thrombomodulin.
KLF4 = 935.790 Hz (F)

LCP2
Lymphocyte cytosolic protein 2, also known as LCP2 or SLP-76, is a gene that encodes a signal-transducing adaptor protein. LCP2 plays a positive role in promoting T cell development and activation as well as mast cell and platelet function. One of the platelets' function is to regulate lymphatic vascular development without risk of failure to separate emerging lymphatic vessels from blood vessels.
LCP2 = 405.523 Hz (F)

LH
Luteinizing hormone (LH, also known as lutropin and sometimes lutrophin) is a hormone produced by gonadotroph cells in the anterior pituitary gland. In females, an acute rise of LH ("LH surge") triggers ovulation and development of the corpus luteum. In males, where LH had also been called interstitial cell-stimulating hormone (ICSH), it stimulates Leydig cell production of testosterone. It acts synergistically with FSH. Its structure is similar to that of the other glycoprotein hormones, follicle-stimulating hormone (FSH), thyroid-stimulating hormone (TSH), and human chorionic gonadotropin (hCG). The protein dimer contains 2 glycopeptidic subunits, labeled alpha and beta subunits, that are non-covalently associated (i.e., without any disulfide bridge linking them): The alpha subunits of LH, FSH, TSH, and hCG are identical. The beta subunits vary. The different composition of these oligosaccharides affects bioactivity and speed of degradation. The biologic half-life of LH is 20 minutes, shorter than that of FSH (3–4 hours) and hCG (24

hours). In males, LH acts upon the Leydig cells of the testis and is regulated by GnRH. The Leydig cells produce testosterone (T) under the control of LH, which regulates the expression of the enzyme 17-beta hydroxysteroid dehydrogenase that is used to convert androstenedione, the hormone produced by the gonads, to testosterone, an androgen that exerts both endocrine activity and intratesticular activity on spermatogenesis.
Lutropin is used with follicle stimulating hormone (FSH) to stimulate a follicle(egg) to develop and mature. The therapy is used when a woman desires pregnancy and her ovaries can produce a follicle but hormonal stimulation is not sufficient to make the follicle mature. Often, HCG medication is used as an LH substitute because it activates the same receptor. Medically used hCG is derived from urine of pregnant women, is less costly, and has a longer half-life than LH.
LH-Alpha = hCG
LH-Beta = 764.166 Hz (F)

LHX2
LIM/homeobox protein Lhx2 is a protein that in humans is encoded by the LHX2 gene. Acts as a transcriptional activator. Stimulates the promoter of the alpha-glycoprotein gene. Its transcriptional regulatory protein is involved in the control of cell differentiation in developing lymphoid and neural cell types. Lhx2 plays a key role in central nervous system (CNS) and embryonic tissue development. Cyclic expression of Lhx2 regulates hair
formation.
LHX2 = 813.020 Hz (F)

LIN28A
Lin-28 homolog A is a protein that in humans is encoded by the LIN28 gene. LIN28 is highly expressed in human embryonic stem cells and can enhance the efficiency of the formation of induced pluripotent stem (iPS) cells from human fibroblasts. Lin28 enhances tissue repair by reprogramming cellular metabolism.
LIN28A = 416.676 Hz (F)

LMNA
Lamin A/C also known as LMNA is a protein that in humans is encoded by the LMNA gene. Lamin A/C belongs to the lamin family of proteins. A telomere, which plays an important role in cell division is a DNA sequence at the end region of a chromosome and protects the chromosome from fraying damage or the fusing with nearby chromosomes .Each time a cell divides , DNA unwraps and its information copied but the telomere is not copied. When the cell division process is complete, the DNA reforms and the telomeres gets shorter each time this process occurs. The Hayflick limit is the number of times the duplication can take place before the telomere becomes too short potentially damaging the cell and reproduction thereof.
This shorting process is associated with ageing and cancers . However telomeres do not shorten in tissues where cells do not continually divide e.g. heart muscle. The nuclear lamina promotes telomere aggregation and centromere peripheral localization during senescence of human mesenchymal stem cells.

LMNA = 430.513 Hz (E)

MAPK12
Mitogen-activated protein kinase 12 (MAP kinase 12), also known as extracellular signal-regulated kinase 6 (ERK6) or stress-activated protein kinase 3 (SAPK3), is an enzyme that in humans is encoded by the MAPK12 gene. MAPK12 is a key regulator in skeletal muscle metabolic adaptation.
MAPK12 = 768.134 Hz (F)

MC1R
The melanocortin 1 receptor (MC1R), also known as melanocyte-stimulating hormone receptor (MSHR), melanin-activating peptide receptor, or melanotropin receptor, is a G protein-coupled receptor that binds to a class of pituitary peptide hormones known as the melanocortins, which include adrenocorticotropic hormone (ACTH) and the different forms of melanocyte-stimulating hormone (MSH). MC1R is one of the key proteins involved in regulating mammalian skin and hair color. It is located on the plasma membrane of specialized cells known as melanocytes, which produce the pigment melanin through a process referred to as melanogenesis. It
works by controlling the type of melanin being produced, and its activation causes the melanocyte to switch from generating the yellow or red phaeomelanin by default to the brown or black eumelanin in replacement.
MC1R, is known to be associated with skin pigment and tanning ability.
Variations in the gene responsible for making MC1R are related to differences in hair and skin color, with certain types known to be associated with red hair and pale skin. Some variants of the gene are thought to indicate that a person may have an increased risk of developing skin cancer, and testing for such variants
could help individuals lower their risk, enabling them to adopt more protective behavior when exposed to the sun.
MC1R = 635.868 Hz (A)

MC3R
Melanocortin receptor 3 is a protein that in humans is encoded by the MC3R gene. This gene encodes MC3, a G-protein coupled receptor for melanocyte-stimulating hormone and adrenocorticotropic hormone that is expressed in tissues other than the adrenal cortex and melanocytes. This gene maps to the same region as the locus for benign neonatal epilepsy. Mice deficient for this gene have increased fat mass despite decreased food intake suggesting a role for this gene product in the regulation of energy homeostasis.
MC3R = 660.184 Hz (F)

MC4R
Melanocortin receptor 4 is a protein that in humans is encoded by the MC4R gene. It encodes the MC4 protein, a G-protein coupled receptor that binds alpha-melanocyte stimulating hormone (alpha-MSH). In murine models MC4 receptors have been found to be involved in feeding behaviour, the regulation of metabolism, sexual behaviour, and male erectile function.

In 2008, it was reported that MC4R mutations were associated with inherited human obesity. They were found in heterozygotes, suggesting an autosomal dominant inheritance pattern. However, based on other research and observations, these mutations seem to have an incomplete penetrance and some degree of codominance. It has a prevalence of 1-2.5% in people with BMIs of greater than 30, making it the most commonly known genetic defect predisposing people to obesity. In 2009, two very large genome wide association studies of body mass index (BMI), confirmed the association of variants about 150 kilobases downstream of the MC4R gene with insulin resistance, obesity and other anthropometric traits.
MC4R = 676.754 Hz (F)

MEK1
Dual specificity mitogen-activated protein kinase kinase 1 is an enzyme that in humans is encoded by the MAP2K1 gene. The protein encoded by this gene is a member of the dual-specificity protein kinase family that acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon activation by a wide variety of extra- and intracellular signals. As an essential component of the MAP kinase signal transduction
pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development.
MEK/ERK signaling is critical to the aging process. The level of active phosphorylated ERK was decreased in senescent cells. Decreased ERK activity was found to be associated with an age-related decline in the proliferative response of hepatocytes to mitogenic stimulation. On the other hand, caloric restriction, an intervention that delays the onset of many age-related declines in physiologic function, prevented an age-related loss in ERK activity. Although some controversy exists as to whether the hypertrophy caused by activation of the MEK/ERK pathway is compensatory or pathological, activation of MEK/ERK signaling was shown to enhance cardiac function. MEK/ERK activation resulted in increased fractional shortening, stroke volume, cardiac output, and maximum dP/dt.
MEK1 = 795.613 Hz (D)

MITF
Microphthalmia-associated transcription factor (MITF) is a basic helix-loop-helix leucine zipper transcription factor involved in melanocyte and osteoclast development. MITF is the most characterized member of the MIT family. Its gene resides at the mi locus in mice, and mutation of this gene results in deafness, bone loss, small eyes, and poorly pigmented eyes and skin. The primary cell types affected in MITF-deficient mice are mast cells, osteoclasts, and melanocytes.
MITF = 396.143 Hz (F)

MMP1
Matrix metalloproteinase-1 (MMP-1) also known as interstitial collagenase and fibroblast collagenase is an enzyme that in humans is encoded by the MMP1 gene. Matrix

Metalloproteinase-1 (MMP-1) is expressed by fibroblasts, keratinocytes, endothelial cells, monocytes and macrophages. GelatiMMPs are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Specifically, MMP-1 breaks down the interstitial collagens, types I, II, and III. In physiologic remodeling of bone and other connective tissues, proteinases such as the matrix metalloproteinases (MMPs) which can cleave Type I collagen play a critical role. In bone, MMP-1 is secreted by stromal fibroblasts, osteoblasts, and osteoclasts. Only the collagenases (MMP-1 and MMP-8) cleave native undenatured collagen at neutral pH.
Matrix metalloproteinase-1 (MMP-1) is able to digest fibrous scar tissue and improve muscle healing after injury. MMP-1 also enhances myoblast differentiation, which is a critical step in the sequence of muscle regeneration.
MMP1 = 847.418 Hz (D)

MMP8
Neutrophil collagenase, also known as matrix metalloproteinase-8 (MMP-8) or PMNL collagenase (MNL-CL), is a collagen cleaving enzyme which is present in the connective tissue of most mammals. In humans, the MMP-8 protein is encoded by the MMP8 gene. Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases.
However, the enzyme encoded by this gene is stored in secondary granules within neutrophils and is activated by autolytic cleavage. Its function is degradation of type I, II and III collagens. Neutrophil collagenase (matrix metalloproteinase 8 [MMP-8]) is an important mediator of tissue destruction in inflammatory diseases. MMP-8 participates in wound repair by contributing to the resolution of inflammation and open the possibility to develop
new strategies for treating wound healing defects. Collagenase cleaves collagen into two distinct and specific peptide fragments. It is released by intact neutrophils during phagocytosis as a collagenase precursor (procollagenase) and is activated by trypsin, hypochlorous acid or rheumatoid synovial fluid.
Collagenase acts as an anticoagulant because it digests fibrinogen. It is inhibited by alpha-1-antitrypsin and alpha-2-macroglobulin. Some diseases associated with over abundant collagenase secretion include rheumatoid arthritis and certain diseases of the eye like ulcerated corneas.
MMP8 = 978.302 Hz (F)

MMP9
Matrix metallopeptidase 9 (MMP-9), also known as 92 kDa type IV collagenase, 92 kDa gelatinase or gelatinase B (GELB), is an enzyme that in humans is encoded by the MMP9 gene. Proteases of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological
processes, such as embryonic development, reproduction, angiogenesis, bone

development, wound healing, cell migration, learning and memory, as well as in pathological processes, such as arthritis, intracerebral hemorrhage, and metastasis. Most MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens and other extracellular matrix proteins. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling.
Gelatinase B, along with elastase, appears to be a regulatory factor in neutrophil migration across the basement membrane. Gelatinase B plays several important functions within neutrophil action, such as degrading extracellular matrix, activation of IL-1beta, and cleavage of several chemokines. In a mouse model, Gelatinase B deficiency resulted in resistance to endotoxin shock, suggesting that Gelatinase B is important in sepsis. Thrombospondins, intervertebral disc proteins, regulate the effective levels of matrix metalloproteinases (MMPs) 2 and 9, which are key effectors of ECM remodeling.nase B is diabetogenic in acute and chronic pancreatitis by cleaving insulin. Gelatinase B is greatly upregulated during human respiratory epithelial healing. Using a gelatinase B deficient mouse model, it was seen that gelatinase B coordinated epithelial wound repair and deficient mice were unable to remove the fibrinogen matrix during wound healing. When interacting with TGF-beta1, Gelatinase B also stimulates collagen contraction, aiding in wound closure.
Gelatinase B has been found to be associated with numerous pathological processes, including cancer, immunologic and cardiovascular diseases.
MMP9 = 528.607 Hz (F)

MYC
Myc (c-Myc) is a regulator gene that codes for a transcription factor. A mutated version of Myc is found in many cancers, which causes Myc to be constitutively (persistently) expressed. This leads to the unregulated expression of many genes, some of which involved in cell proliferation, and results in the formation of cancer.
Myc is activated upon various mitogenic signals such as Wnt, Shh and EGF (via the MAPK/ERK pathway). By modifying the expression of its target genes, Myc activation results in numerous biological effects. The first to be discovered was its capability to drive cell proliferation (upregulates cyclins, downregulates p21), but it also plays a very important role in regulating cell growth (upregulates ribosomal RNA and proteins), apoptosis (downregulates Bcl-2), differentiation, and stem cell self-renewal. Myc is very often found to be upregulated in many types of cancers. Myc overexpression stimulates gene amplification, presumably through DNA over-replication.
MYC = 925.945 Hz (D)

NANOG
NANOG is a transcription factor critically involved with self-renewal of undifferentiated embryonic stem cells. In humans, this protein is encoded by the NANOG gene. NANOG overexpression in human embryonic stem cells enables their propagation for multiple passages during which the cells remain pluripotent. Gene knockdown of Nanog promotes differentiation, thereby demonstrating a role for these factors in human

embryonic stem cell self-renewal.
NANOG = 634.082 Hz (F)

NGF
Nerve growth factor (NGF) is a small secreted protein that is important for the growth, maintenance, and survival of certain target neurons (nerve cells). It also functions as a signaling molecule. NGF is critical for the survival and maintenance of sympathetic and sensory neurons. Without it, these neurons undergo apoptosis.
Nerve growth factor causes axonal growth. Studies have shown that it causes axonal branching and a bit of elongation.
There is evidence that NGF circulates throughout the entire body and is important for maintaining homeostasis.
NGF prevents or reduces neuronal degeneration in animal models of neurodegenerative diseases and these encouraging results in animals have led to several clinical trials in humans. NGF has also been shown to promote peripheral nerve regeneration in rats. The expression of NGF is increased in inflammatory diseases where it suppresses inflammation. Also, NGF appears to promote myelin repair. Hence NGF may be useful for the treatment of multiple sclerosis. NGF could also be involved in various psychiatric disorders, such as dementia, depression, schizophrenia, autism, Rett syndrome, anorexia nervosa, and bulimia nervosa. Dysregulation of NGF signaling has also been linked to Alzheimer's disease.
NGF-beta = 494.103 Hz (F)

NRP
Neuropilin-1 is a protein that in humans is encoded by the NRP1 gene. This is one of two human neuropilins.
NRP1 is a membrane-bound coreceptor to a tyrosine kinase receptor for both vascular endothelial growth factor (VEGF) and semaphorin family members. NRP1 plays versatile roles in angiogenesis, axon guidance, cell survival, migration, and invasion.
Neuropilin-2 (NRP2) is a protein that in humans is encoded by the NRP2 gene.
Neuropilin is a type I transmembrane receptor that has been implicated in aspects of axon growth and guidance and has been shown to act as a high affinity receptor for class III semaphorins and vascular endothelial growth factor (VEGF). A closely related protein, neuropilin-2, shares a common domain structure and signifcant homology with neuropilin and also acts as a receptor for the class III semaphorins and VEGF.
Both neuropilins are involved in regulating many physiological pathways including axonal guidance and angiogenesis, however they exhibit differential expression in the adult vasculature.
Neuropilin-2 is polysialylated and expressed on the surface of dendritic cells. It is also expressed by venous and lymphatic endothelium. Neuropilin is expressed predominantly by arterial endothelium.
Neuropilin-1 is a therapeutic target protein in the treatment for leukemia and lymphoma, since It has been shown that there is increased expression in neuropilin-1 in leukemia and lymphoma cell lines. Also, antagonism of neuropilin-1 has been found to inhibit tumour cell migration and adhesion.
NPR1 = 484.436 Hz (F)

NPR2 = 707.267 Hz (F)

NTF4
Neurotrophin-4 (NT-4), also known as neurotrophin-5 (NT-5), is a protein that in humans is encoded by the NTF4 gene. NT-4 is a neurotrophic factor that signals predominantly through the TrkB receptor tyrosine kinase. It helps regulate peripheral and central nervous system development and function. NT-4 is a potent neurotrophic factor which supports the growth and survivability of nerve and/or glial cells. In combination with other trophic factors, is involved in the postnatal survival of retinal neurons during both development and degeneration. Pruritus, inflammation, allergy, asthma, atopic dermatitis and airway hyperresponsiveness (AHR), are associated with the disruption of the neurosensory network activities. NT-4 plays role in skin physiology as agent of hair growth control, its expression is hair cycle-dependent.
NT-4 = 410.856 Hz (F)

OCT4
Oct-4 (octamer-binding transcription factor 4) also known as POU5F1 (POU domain, class 5, transcription factor 1) is a protein that in humans is encoded by the POU5F1 gene. Oct-4 is a homeodomain transcription factor of the POU family. This protein is critically involved in the self-renewal of undifferentiated embryonic stem cells. Oct-4 is one of the most widely characterized genes associated with pluripotent stem cells.
OCT4 = 389.502 Hz (F)

OPG
Osteoprotegerin (OPG), also known as osteoclastogenesis inhibitory factor (OCIF), or tumor necrosis factor receptor superfamily member 11B (TNFRSF11B), is a protein that in humans is encoded by the TNFRSF11B gene. Osteoprotegerin is a cytokine receptor, and a member of the tumor necrosis factor (TNF) receptor superfamily. Osteoprotegerin production is stimulated in vivo by the female sex hormone estrogen.
Osteoprotegerin has been used experimentally to decrease bone resorption in women with postmenopausal osteoporosis and in patients with lytic bone metastases. Elevated OPG levels has been reported in heart diseases, in placebo effect serum responses, in IBS patients and in severe mental disorders. Mutations in TNFRSF11B are associated with osteoarthritis. It has been found that osteoprotegerin is expressed on mesenchymal stem cells, which mediates their suppressive effect on osteoclastogenesis.
OPG = 843.347 Hz (F)

OPRD1
The D-opioid receptor, also known as delta opioid receptor or simply delta receptor, abbreviated DOR, is an opioid receptor that has enkephalins as its endogenous ligands. Activation of OPRD1 receptors produces some analgesia, antidepressant effect and also upregulation of BDNF production. The up-regulation of DOR expression and DOR activation increase the neuronal tolerance to hypoxic/ischemic stress. The DOR signal triggers (depending on stress duration and severity) different mechanisms at multiple levels to preserve neuronal survival, including the stabilization of homeostasis and increased pro-survival signaling (e.g., PKC-ERK-Bcl 2) and anti-oxidative capacity. The

DOR-mediated neuroprotection and cardioprotection have the potential to significantly alter the clinical pharmacology in terms of prevention and treatment of life-threatening conditions like stroke and myocardial infarction.
OPR1 = 739.640 Hz (F)

OPRK1
The K-opioid receptor (KOR) is a protein that in humans is encoded by the OPRK1 gene. The kappa-opioid receptor is one of four related receptors that bind opium-like compounds in the brain and are responsible for mediating the effects of these compounds. These effects include altering the perception of pain, consciousness, motor control, and mood. Kappa-opioid receptors are widely distributed in the brain (hypothalamus, periaqueductal gray, and claustrum), spinal cord (substantia gelatinosa), and in pain neurons.
The k-opioid receptor is involved in stress response and may have anticonvulsant effects. Activation of the k-opioid receptor appears to antagonize many of the effects of the mu-opioid receptor. Kappa-opioid receptor ligands are also known for their characteristic diuretic effects, due to their negative regulation of antidiuretic hormone (ADH). Kappa-opioid agonism is neuroprotective against hypoxia/ischemia.
OPRK1 = 781.139 Hz (F)

OPRM1
The Mu-opioid receptors (MOR) are a class of opioid receptors with high affinity for enkephalins and beta-endorphin but low affinity for dynorphins. They are also referred to as mu opioid peptide (MOP) receptors. The prototypical mu receptor agonist is morphine, the primary psychoactive alkaloid in opium. In fact, mu refers to morphine. MOR can mediate acute changes in neuronal excitability via "disinhibition" of presynaptic release of GABA. Mu opioid receptors mediate positive reinforcement following direct (morphine) or indirect (alcohol, cannabinoids, nicotine) activation.
OPRM1 = 820.348 Hz (F)

PCSK9
Proprotein convertase subtilisin/kexin type 9, also known as PCSK9, is an enzyme that in humans is encoded by the PCSK9 gene. PCSK9 has medical significance because it acts in cholesterol homeostasis. This protein plays a major regulatory role in cholesterol homeostasis. PCSK9 binds to the epidermal growth factor-like repeat A (EGF-A) domain of the low-density lipoprotein receptor (LDLR), inducing LDLR degradation. Reduced LDLR levels result in decreased metabolism of LDL-C, which could lead to hypercholesterolemia.
LDL-C is removed from the blood when it binds to an LDLR on the surface of liver cells, and is taken inside the cells. When PCSK9 binds to an LDLR, the receptor is destroyed along with the LDL particle. But if PCSK9 does not bind, the receptor can return to the surface of the cell and remove more cholesterol.
PCSK9 = 500.541 Hz (F)

PEPCK
Phosphoenolpyruvate carboxykinase (PEPCK) is an enzyme in the lyase family used in

the metabolic pathway of gluconeogenesis. It converts oxaloacetate into phosphoenolpyruvate and carbon dioxide. It is found in two forms, cytosolic and mitochondrial. PEPCK is enhanced, both in terms of its production and activation, by many factors. Transcription of the PEPCK gene is stimulated by glucagon, glucocorticoids, retinoic acid, and adenosine 3',5'-monophosphate (cAMP), while it is inhibited by insulin. Of these factors, insulin, a hormone that is deficient in the case of diabetes, is considered dominant, as it inhibits the transcription of many of the stimulatory elements. PEPCK activity is also inhibited by hydrazine sulfate, and the inhibition therefore decreases the rate of gluconeogenesis.
In prolonged acidosis, PEPCK is upregulated in renal proximal tubule brush border cells, in order to secrete more NH3 and thus to produce more HCO3. Animal studies reported more activity and endurance than controls, enhanced exercise capacity, with a VO2max of 156 ± 8.0 ml/kg/min, a maximal respiratory exchange ratio of 0.91 ± 0.03, and a blood lactate concentration of 3.7 ± 1.0 mm after running for 32 min at a 25°; the values for control animals were 112 ± 21 ml/kg/min, 0.99 ± 0.08, and 8.1 ± 5.0 mm respectively. The animals ate 60% more than controls but had half the body weight and 10% the body fat as determined by magnetic resonance imaging. In addition, the number of mitochondria and the content of triglyceride in the skeletal muscle were greatly increased as compared with controls, besides, they recorded an extended life span relative to control animals. Overexpression of PEPCK-C repatterns energy metabolism and leads to greater longevity, the study concluded.
PEPCK1 cytosolic = 466.197 Hz (E)
PEPCK2 mitochondrial = 476.627 Hz (E)

PI3K
Phosphatidylinositol-4,5-bisphosphate 3-kinase (the HUGO official stem symbol for the gene family = PI3K, also called phosphatidylinositide 3-kinases, PI 3-kinases, PI3Ks, PI(3)Ks, or PI-3Ks) are a family of enzymes involved in cellular functions such as cell growth, proliferation, differentiation, motility, survival and intracellular trafficking, which in turn are involved in cancer.
Class I PI 3-kinases are a subgroup of the enzyme family, phosphoinositide 3-kinase that possess a common protein domain structure, substrate specificity, and method of activation. Class I PI 3-kinases are further divided into two subclasses, class IA PI 3-kinases and class IB PI 3-kinases. The phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha PIK3CA, also called p110alpha protein, is a class I PI 3-kinase catalytic subunit. The human p110alpha protein is encoded by the PIK3CA gene. Recent evidence has shown that the PIK3CA gene is mutated in a range of human cancers. It has been found to be oncogenic and has been implicated in cervical cancers.
Activation of PI3K(p110alpha) protects the heart against MI-induced heart failure. Cardiac-selective targets that mediate the protective effects of PI3K(p110alpha) represent new drug targets for heart failure.
PI3K(p110alpha) = 837.492 Hz (F)

PIP
Prolactin-inducible protein also known as gross cystic disease fluid protein 15 (GCDFP-

15), extra-parotid glycoprotein (EP-GP), gp17 seminal actin-binding protein (SABP) or BRST2 is a protein that in humans is encoded by the PIP gene. It is upregulated by prolactin and androgens and downregulated by estrogen.
PIP = 825.186 Hz (G)

PKB
Akt, also known as Protein Kinase B (PKB), is a serine/threonine-specific protein kinase that plays a key role in multiple cellular processes such as glucose metabolism, apoptosis, cell proliferation, transcription and cell migration. AKT1 is more specifically involved in cellular survival pathways, by inhibiting apoptotic processes; whereas AKT2 is more specific for the insulin receptor signaling pathway. Moreover, while AKT1 and AKT2 are often implicated in many aspects of cellular transformation, the 2 isoforms act in a complementary opposing manner. The role of AKT3 is less clear, though it appears to be predominantly expressed in brain.
AKT1 has diverse regulatory functions. It promotes glucose transport through translocation of GLUT1 and GLUT4 to the plasma membrane and controls glycogen synthesis by insulin-dependent phosphorylation and inactivation of GSK-3. Akt1 has also been shown to inhibit apoptosis in multiple cell types. The antiapoptotic activities of Akt1 are thought to be mediated by phosphorylation of the proapoptotic protein BAD, procaspase 9, and a forkhead transcription factor. Akt1 also phosphorylates endothelial cell nitric oxide synthase, which regulates vasomotor tone, and regulates ploidy in vascular smooth muscle.
In experiments with mice, activation of Akt1 triggered a striking reduction of body mass due to decreased visceral fat mass and white adipocyte atrophy. Akt1 transgenic mice demonstrated enhanced oxygen consumption coupled with reduced physical activity levels and a lowered respiratory exchange ratio, indicating a greater reliance on fatty acid oxidation for metabolic energy requirements.
AKT2 like the other AKT members is activated in cells in response to diverse stimuli such as hormones, growth factors and extracellular matrix components and is involved in glucose metabolism, transcription, survival, cell
proliferation, angiogenesis, and cell motility. Over-expression of AKT2 contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. Sometimes called hardening or clogging of the arteries, atherosclerosis is the buildup of cholesterol, fatty cells, and inflammatory deposits on the inner walls of the arteries, restricting blood flow to the heart. The disease can affect the arteries in the heart, legs, brain, kidneys, and other organs, and is the most common cause heart attacks, strokes, and peripheral vascular disease.
AKT3 regulates lipid entry into macrophages and prevents the cells from storing excessive amounts of cholesterol and collecting in the artery.
PKB1 = 375.177 Hz (F)
PKB2 = 375.753 Hz (F)
PKB3 = 375.771 Hz (D)

PKC
Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family

members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. PKCA or PRKCA plays a vital role in epithelial tissue, the tissue that covers all external and internal surfaces of the body. Specifically, PKCA is involved in altering the function of tight junctions. Tight junctions exist at the meeting point between two cells. Here, tight junctions fuse together to form an impermeable barrier to not only large molecules such as proteins, but also smaller molecules like water. Research suggests that PKC alpha's may have a role in cardiac tissue as a regulator of contractility and hypertrophy.
PKCA shows important regulation of phospholipase D. Phospholipase D is located on the plasma membrane and is responsible for hydrolyzing phosphatidylcholine to phosphatidic acid and choline. Research has indicated that phospholipase D may play roles in tumorigenesis by altering cellular events such as invasion and migration. PKCA is correlated with the differentiation of erythroid progenitor cells in bone marrow. These undifferentiated cells give rise to the mass of red blood cells present in blood. Increased activation of PKCA is associated with the growth and invasion of cancers, malignant brain cancer and a high proliferation rate of glioma tumor cells.
PKCB1 or PRKCB1 has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress.
PRKCD is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types.
PRKD1 binds to the trans-Golgi network and regulates the fission of transport carriers specifically destined to the cell surface.
PRKD2 can be activated by phorbol esters as well as by gastrin via the cholecystokinin B receptor (CCKBR) in gastric cancer cells. It can bind to diacylglycerol (DAG) in the trans-Golgi network (TGN) and may regulate basolateral membrane protein exit from TGN.
PRKD3 is involved in resistance to oxidative stress.
PRKCA = 517.175 Hz (F)
PRKCB = 517.971 Hz (F)
PRKCD = 522.304 Hz (F)
PRKD1 = 685,283 Hz (D)
PRKD2 = 651.931 Hz (F)
PRKD3 = 676.999 Hz (E)

PPARA
Peroxisome proliferator-activated receptor alpha (PPAR-alpha or PPAR), also known as NR1C1 (nuclear receptor subfamily 1, group C, member 1), is a nuclear receptor protein that in humans is encoded by the PPARA gene. Together with Peroxisome proliferator-activated receptor delta and Peroxisome proliferator-activated receptor gamma, PPAR-alpha is part of the subfamily of Peroxisome proliferator-activated receptors.
PPAR-alpha is a transcription factor and a major regulator of lipid metabolism in the liver. PPAR-alpha is activated under conditions of energy deprivation and is necessary for the process of ketogenesis, a key adaptive response to prolonged fasting. Activation

of PPAR-alpha promotes uptake, utilization, and catabolism of fatty acids by upregulation of genes involved in fatty acid transport, fatty binding and activation, and peroxisomal and mitochondrial fatty acid beta-oxidation.
PPAR-alpha is primarily activated through ligand binding. Synthetic ligands include the fibrate drugs, which are used to treat hyperlipidemia, and a diverse set of insecticides, herbicides, plasticizers, and organic solvents collectively referred to as peroxisome proliferators. Endogenous ligands include fatty acids and various fatty acid-derived compounds. Expression of PPAR-alpha is highest in tissues that oxidize fatty acids at a rapid rate. Lower PPAR-alpha expression levels are found in small and large intestine, skeletal muscle and adrenal gland. Human PPAR-alpha seems to be expressed equally among various tissues, with high expression in liver, intestine, heart, and kidney. PPAR-alpha serves as cellular receptor for fibrates, a class of drugs used in the treatment of dyslipidemia. Fibrates effectively lower serum triglycerides and raises serum HDL-cholesterol levels. Although clinical benefits of fibrate treatment have been observed, the overall results are mixed and have led to reservations about the broad application of fibrates for the treatment of coronary heart disease, in contrast to statins. PPAR-alpha agonists may carry therapeutic value for the treatment of Non-alcoholic fatty liver disease. PPAR-alpha may also be a site of action of certain anticonvulsants.
PPARA = 945.481 Hz (F)

PPARD
Peroxisome proliferator-activated receptor beta or delta (PPAR-beta or PPAR-delta), also known as NR1C2 (nuclear receptor subfamily 1, group C, member 2) is a nuclear receptor that in humans is encoded by the PPARD gene. PPARD is a nuclear hormone receptor that governs a variety of biological processes and may be involved in the development of several chronic diseases, including diabetes, obesity, atherosclerosis, and cancer. PPARD is highly expressed in many tissues, including colon, small intestine, liver and keratinocytes, as well as in heart, spleen, skeletal muscle, lung, brain and thymus. PPARA and PPARD expression is reactivated in the adult epidermis after various stimuli, resulting in keratinocyte proliferation and differentiation such as tetradecanoylphorbol acetate topical application, hair plucking, or skin wound healing. Both are important for
the rapid epithelialization of a skin wound and that each of them plays a specific role in this process.
PPARA is mainly involved in the early inflammation phase of the healing, whereas PPARD is implicated in the control of keratinocyte proliferation. Its inflammation-induced increase in activity at the wound edge maintains a sufficient number of viable keratinocytes for reepithelialization. PPARD activation affects a number of athletically beneficial changes in the body. It can increase its consumption of glucose in skeletal muscle cells, as well as, activate more gene expression of those skeletal muscle tissues. The body also can express genes that code for the utilization of lipids as fuel sources at a higher rate. This accelerated gene expression changes the body’s metabolism to favor the burning of lipids for energy within the body instead of proteins for muscle or carbohydrates. Essentially, the body would burn fat stores while increasing muscle cell production, allowing users to become more lean and stronger simultaneously.

PPARD = 914.142 Hz (F)

PPARGC1A
Peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC-1alpha or PPARGC) is a protein that in humans is encoded by the PPARGC1A gene. PGC-1alpha is a transcriptional coactivator that regulates the genes involved in energy metabolism. PGC-1alpha is a regulator of mitochondrial biogenesis and function. Endurance exercise has been shown to activate the PGC-1alpha gene in human skeletal muscle. This protein may be also involved in controlling blood pressure, regulating cellular cholesterol homoeostasis, and the
development of obesity.
Production of PGC-1-alpha in cells is stimulated by physical activity and exercise, the presence of cold, glucagon and reactive oxygen species. PPARgamma coactivator-1-alpha (PGC-1-alpha), in cooperation with several transcription factors, has emerged as a key regulator of several aspects of mammalian energy metabolism including mitochondrial biogenesis, adaptive thermogenesis in brown adipose tissue, glucose uptake, fiber type-switching in skeletal muscle, gluconeogenesis in liver and insulin secretion from pancreas.
PGC-1alpha helps preserve mitochondrial function, neuromuscular junctions, and muscle integrity during aging. It also prevents muscle wasting by reducing apoptosis, autophagy, and proteasome degradation. PGC-1alpha significantly improved whole-body health; both the loss of bone mineral density and the increase of systemic chronic inflammation, observed during normal aging.
Maintaining muscle size and fiber composition requires contractile activity. Increased activity stimulates expression of the transcriptional coactivator PGC-1-alpha –, which promotes fiber-type switching from glycolytic toward more oxidative fibers. In response to disuse or denervation, but also in fasting and many systemic diseases, muscles undergo marked atrophy through a common set of transcriptional changes. Increased expression of PGC-1-alpha also increased mRNA for several genes involved in energy metabolism whose expression decreases during atrophy.
Upregulation of PGC-1, within physiological limits, does improve mitochondrial biogenesis, fatty acid oxidation, and insulin sensitivity in healthy and insulin-resistant skeletal muscle. Thus, it is likely that maintenance of upregulated levels of PGC-1-alpha-is protective against diabetes.
PPARGC1A = 613.279 Hz (F)

PPARG2
Peroxisome proliferator-activated receptor gamma (PPAR-gamma or PPARG), also known as the glitazone receptor, or NR1C3 (nuclear receptor subfamily 1, group C, member 3) is a type II nuclear receptor that in humans is encoded by the PPARG gene. Two isoforms of PPARG are detected in the human and in the mouse: PPAR-gamma1 (found in nearly all tissues except muscle) and PPAR-gamma2 (mostly found in adipose tissue and the intestine).
PPARG regulates fatty acid storage and glucose metabolism. The genes activated by PPARG stimulate lipid uptake and adipogenesis by fat cells. PPAR-gamma has been implicated in the pathology of numerous diseases including obesity, diabetes,

atherosclerosis, and cancer. PPAR-gamma agonists have been used in the treatment of hyperlipidaemia and hyperglycemia. PPAR-gamma decreases the inflammatory response of many cardiovascular cells, particularly endothelial cells. PPAR-gamma activates the PON1 gene, increasing
synthesis and release of paraoxonase 1 from the liver, reducing atherosclerosis.
PPARG2 = 368.441 Hz (F)

PTEN
Phosphatase and tensin homolog (PTEN) is a protein that, in humans, is encoded by the PTEN gene. Mutations of this gene are a step in the development of many cancers. PTEN acts as a tumor suppressor gene through the action of its phosphatase protein product. This phosphatase is involved in the regulation of the cell cycle, preventing cells from growing and dividing too rapidly. PTEN expression is common in primary melanomas and is associated with aggressive tumor behavior.
PTEN = 863.843 Hz (F)

PTGDR2
G protein-coupled receptor 44 (GPR44) is a human protein. GPR44 has also been designated as CD294 and PTGDR2. G protein-coupled receptors (GPCRs), such as GPR44, are integral membrane proteins containing 7 putative transmembrane domains (TMs). These proteins mediate signals to the interior of the cell via activation of heterotrimeric G proteins that in turn activate various effector proteins, ultimately resulting in a physiologic response. GPR44 has recently been found to belong to the prostanoid receptor family and named DP2, with this becoming the official IUPHAR nomenclature. GPR44 has recently been found when activated by elevated level of prostaglandin D2 (PGD2), it could inhibit hair growth. This suggests the PGD2-GPR44 pathway as a potential target for baldness treatment.
PTGDR2 - 792.984 Hz (F)

RAS
The angiotensin receptors are a class of G protein-coupled receptors with angiotensin II as their ligands. They are important in the renin-angiotensin system: they are responsible for the signal transduction of the vasoconstricting stimulus of the main effector hormone, angiotensin II. The AT1 subtype is found in the heart, blood vessels, kidney, adrenal cortex, lung and brain and mediates the vasoconstrictor effects. Effects mediated by the AT1 receptor include vasoconstriction, aldosterone synthesis and secretion, increased vasopressin secretion, cardiac hypertrophy, augmentation of peripheral noradrenergic activity, vascular smooth muscle cells proliferation, decreased renal blood flow, renal renin inhibition, renal tubular sodium reuptake, modulation of central sympathetic nervous system activity, cardiac contractility, central osmocontrol and extracellular matrix formation.
Experimental disruption of muscle renin-angiotensin system enhances muscle function despite reducing muscle mass, it also compromises repair after injury. AT2 receptors are more plentiful in the fetus and neonate. The AT2 receptor remains enigmatic and controversial – is probably involved in vascular growth. Effects mediated by the AT2 receptor are suggested to include inhibition of cell growth, fetal tissue development,

modulation of extracellular matrix, neuronal regeneration, apoptosis, cellular differentiation, and maybe vasodilation and left ventricular hypertrophy. Angiotensin II receptor blockade protects against the slow to fast fiber type shift and type I fiber atrophy.
The renin-angiotensin system (RAS) is typically associated with the regulation of blood pressure and water balance and has well-characterized effects on vascular control and signaling, including vasoconstriction. RAS inhibition is used widely for the treatment of hypertension. However, local RAS exist in multiple tissues including the nervous system, digestive tract, reproductive system, skin, adipose tissue, and lymphatic system and has diverse effects such as autonomic control, fertility, and thermogenesis.
Angiotensin has two forms, type I and type II. While some effect has been observed from the first type, the majority of action that takes place at the receptor sites are in reaction to angiotensin II. An angiotensin receptor is a G protein-coupled receptor, meaning it has a protein that works specifically to transmit chemical signals between cells. As angiotensin II reacts at the A1 protein site, it starts a cascade of physiological processes that affect cell communication and help maintain homeostasis within multiple organ systems, most importantly, the circulatory and renal system via the RAS. The A2 receptor is vital for communication between cells when a
fetus is developing inside the womb, and any breakdown in communication with angiotensin II can result in major birth defects.
AGTR1 = 752,420 Hz (F)
AGTR2 = 754.634 Hz (F)

RHOA
Ras homolog gene family, member A (RhoA) is a small GTPase protein known to regulate the actin cytoskeleton in the formation of stress fibers. In humans, it is encoded by the gene RHOA. RhoA is part of a larger family of related proteins known as the Ras superfamily, a family of proteins involved in the regulation and timing of cell division. RhoA specifically is regarded as a prominent regulatory factor in other functions such as the regulation of cytoskeletal dynamics, transcription, cell cycle progression and cell transformation.
RhoA, mostly found in the cytoplasm, is primarily involved in these activities: actin organization, cell cycle maintenance, cellular development and transcriptional control. Signaling proteins like RhoA, regulate polymerization of actin. RhoA is prevalent in regulating cell shape, polarity and locomotion via actin polymerization, actomyosin contractility, cell adhesion, and microtubule dynamics. RhoA is required for processes involving cell development, some of which include outgrowth, dorsal closure, bone formation, and myogenesis.
Loss of RhoA function is frequently attributed to failed gastrulation and cell migration inability. Activated RhoA also participates in regulating transcriptional control over other signal transduction pathways via various
cellular factors. RhoA as well as several other members of the Rho family are identified as having roles in the regulation of the cytoskeleton and cell division. Given that its overexpression is found in many malignancies, RhoA activity has been linked within several cancer applications due to its significant involvement in cancer signaling cascades. RhoA has also been found to be hyper activated in gastric cancer cells; in

consequence, suppression of RhoA activity partially reversed the proliferation phenotype of gastric cancer cells.
Protein expression of RhoA has been identified to be significantly higher in testicular tumor tissue than that in nontumor tissue. Chronic Myeloid Leukemia (CML), a stem cell disorder that prevents myeloid cells from functioning correctly, has been linked to actin polymerization.
RHOA = 398.674 Hz (E)

SDHC
Succinate dehydrogenase complex subunit C, also known as succinate dehydrogenase cytochrome b560 subunit, mitochondrial, is a protein that in humans is encoded by the SDHC gene. SDHC homologues have been implicated in ageing of lower life forms. Mutations in this gene have been associated with,
- increased oxidative stress and reduced lifespan
- paragangliomas
- mitochondrial respiratory chain deficiency
- sensitivity to low-dose/low-LET ionizing radiation
SDHC = 829.615 Hz (D)

SHBG
Sex hormone-binding globulin (SHBG) or sex steroid-binding globulin (SSBG) is a glycoprotein that binds to sex hormones, to be specific, androgens and estrogens. SHBG has both enhancing and inhibiting hormonal influences. It controls the amount of free testosterone. It decreases with high levels of insulin, growth hormone, insulin-like growth factor 1 (IGF-1), androgens, prolactin and transcortin. High estrogen, and thyroxine cause it to increase.
In an effort to explain obesity-related reductions in SHBG, recent evidence suggests sugar or monosaccharide-induced hepatic lipogenesis, hepatic lipids in general, and cytokines like TNF-alpha and Interleukin reduce SHBG, whereas insulin does not. As an example anti-psoriatic drugs that inhibit TNF-alpha cause an increase in SHBG. The common downstream mechanism for all of these, including the effect of thyroid hormones was downregulation of HNF4, hepatocyte nuclear factor 4.
SHBG levels are decreased by androgens, administration of anabolic steroids, polycystic ovary syndrome, hypothyroidism, diabetes, obesity, Cushing's syndrome, and acromegaly. SHBG levels increase with estrogenic states (oral contraceptives), pregnancy, hyperthyroidism, cirrhosis, anorexia nervosa, and certain drugs. Long-term calorie restriction of more than 50 percent increases SHBG, while lowering free and total testosterone and estradiol. DHEA-S, which lacks affinity for SHBG, is not affected by calorie restriction. Polycystic Ovarian Syndrome is associated with insulin resistance and excess insulin lowers SHBG, which increases free testosterone levels.
SHBG = 801.862 Hz (F)

SIRT1
Sirtuin 1, also known as NAD-dependent deacetylase sirtuin-1, is a protein that in humans is encoded by the SIRT1 gene. SIRT1 stands for sirtuin (silent mating type

information regulation 2 homolog) 1. It is an enzyme that deacetylates proteins that contribute to cellular regulation (reaction to stressors, longevity). Sirtuin 1 is downregulated in cells that have high insulin resistance and inducing its expression increases insulin sensitivity,
suggesting the molecule is associated with improving insulin sensitivity. Furthermore, SIRT1 was shown to de-acetylate and affect the activity of both members of the PGC1-alpha/ERR-alpha complex, which are essential metabolic regulatory transcription factors.
SIRT1 and other members of the sirtuin protein family are part of an intricate stress response system at the cellular level. At times of great cellular stress, the enzyme can push an organism into survival mode to increase the speed at which deoxyribonucleic acid (DNA) is repaired and to limit cellular breakdown. As a result, the enzyme has been examined with regard to the use of it as part of a treatment to stop cellular breakdown as part of the aging process. The enzyme has shown an ability extend the lifespan of a cell, and research has been undertaken to ascertain whether this can be used to extend the lifespan of larger, multicellular organisms.
SIRT1 is able to induce in a cell the 'survival mode', producing effects similar to those of caloric restriction regimes. A caloric restriction regimen induces a higher efficiency in the metabolic process, and studies show that proper application of SIRT1 can act as a shortcut, inducing the same effect without restricting calories.
Beyond the applications related to weight loss, aging and cellular breakdown, SIRT1 has been studied in an attempt to discover how it might be used to fight brain damage. SIRT1 activates a protein known as alpha-secretase (ADAM10). The activation of ADAM10 by the sirtuin enzyme also induces the notch signaling pathway, which has been known to repair neuronal damage in the brain.
SIRT1 = 924.360 Hz (F)

SLC22A4
Solute carrier family 22, member 4, also known as SLC22A4 or OCT1, is a human gene; the encoded protein is an ergothioneine transporter. However, its efficiency of transport for organic cations (e.g., tetraethylammonium) is very low. The transport efficiency for carnitine is also negligible. The protein is responsible for the cotransport of sodium ions and ergothioneine, which is an antioxidant, into cells. Research suggests a role in the development autoimmune diseases, specially rheumatoid arthrits and Crohn's disease. It also has been found that can interfere with brain POUf function and constrain intellectual development.
In animal experiments, SLC22A4 has been implicated as a factor (with Pax6, and p300) to activate gene expression of the corneal's crystallin. These transcription factors are also in the high expression of crystallin genes in the lens, consistent with the “refracton hypothesis” unifying many aspects of the lens and cornea.
SLC22A4 = 418.803 Hz (F)

SMAD3
Mothers against decapentaplegic homolog 3 also known as SMAD family member 3 or SMAD3 is a protein that in humans is encoded by the SMAD3 gene. SMAD3 is a member of the SMAD family of proteins. It mediates the signals from the transforming

growth factor beta (TGF-beta) superfamily ligands that regulate cell proliferation, differentiation and death. Based on its essential role in TGF beta signaling pathway, SMAD3 has been related with tumor growth in cancer development. Increased SMAD3 activity has been implicated in the pathogenesis of scleroderma. SMAD3 is also a multifaceted regulator in adipose physiology and the pathogenesis of obesity and type 2 diabetes.
The role of SMAD3 in the regulation of genes important for cell fate, such as differentiation, growth and dead, implies that an alteration in its activity or repressing of its activity can lead to the formation or development of cancer. The activity of SMAD3 in prostate cancer is related with the regulation of angiogenic molecules expression in tumor vascularization and cell-cycle inhibitor in tumor growth. In mice, mutation of SMAD3 has been linked to colorectal adenocarcinoma, increased systemic inflammation, and accelerated wound healing. Studies have shown that mutations in SMAD3 gene promote colorectal cancer in mice. The altered activity of SMAD3 was linked to chronic inflammation and somatic mutations that contribute to chronic colitis and the development of colorectal cancer. TGF-beta-induced SMAD3 transcriptional regulation response has been associated with breast cancer bone metastasis by its effects on tumor angiogenesis, and epithelial-mesenchymal transition (EMT).
SMAD3 = 880.722 Hz (F)

SOX2
SRY (sex determining region Y)-box 2, also known as SOX2, is a transcription factor that is essential for maintaining self-renewal, or pluripotency, of undifferentiated embryonic stem cells. Sox2 is a member of the Sox family of transcription factors, which have been shown to play key roles in many stages of mammalian development. Mutations in this gene have been linked with bilateral anophthalmia, a severe structural eye deformity. In lung development, Sox2 controls the branching morphogenesis of the bronchial tree and differentiation of the epithelium of airways. Overexpression causes an increase in neuroendocrine, gastric/intestinal and basal cells. Under normal conditions, Sox2 is critical for maintaining self-renewal and appropriate proportion of basal cells in adult tracheal epithelium.
Sox2 is a key upregulated factor in lung squamous cell carcinoma, directing many genes involved in tumor progression. Its overexpression also activates cellular migration and anchorage-independent growth.
Sox2 expression is also found in high gleason grade prostate cancer, and promotes castration-resistant prostate cancer growth. The ectopic expression of SOX2 may be related to abnormal differentiation of colorectal cancer cells. Studies have suggested that thyroid hormone (T3) controls Sox2 expression via the enhancer region. The expression of TRalpha1 (thyroid hormone receptor) is increased in proliferating and migrating neural stem cells. Sox2 in conjunction with Oct4, c-Myc and Klf4 were sufficient for producing induced pluripotent stem cells. The discovery that expression of only four transcription factors was necessary to induce pluripotency allowed future regenerative medicine research to be conducted considering minor manipulations.
SOX2 = 628.742 Hz (F)

SYK
Spleen tyrosine kinase, also known as Syk, is an enzyme which in humans is encoded by the SYK gene.
Syk is expressed in myeloid cells which orchestrate the proper separation of lymphatics and blood system during embryogenesis and beyond. Abnormal function of Syk has been implicated in several instances of hematopoeitic malignancies including translocations involving Itk and Tel. Constitutive Syk activity can transform B cells. Several transforming viruses contain "Immunoreceptor Tyrosine Activation Motifs" (ITAMs) which lead to activation of Syk including Epstein Barr virus, bovine leukemia virus, and mouse mammary tumor virus.
Given the central role of SYK in transmission of activating signals within B-cells, a suppression of this tyrosine kinase might aid in the treatment of autoimmune diseases. Syk inhibition has also been proposed as a therapy for both lymphoma and chronic lymphocytic leukemia. The role of Syk in epithelial malignancies is controversial. Several authors have suggested that abnormal Syk function facilitates transformation in Nasopharyngeal carcinoma and head and neck cancer while other authors have suggested a tumor suppressor role in breast and gastric cancer.
SYK = 485.671 Hz (F)

TCHH
Trichohyalin is a protein in humans that is encoded by the TCHH gene. Trichohyalin confers mechanical strength to the hair follicle inner root sheath and to other toughened epithelial tissues, such as the
hard palate and filiform ridges of the tongue, by forming multiple complex crosslinks with itself and with other structural proteins. The enzyme converts arginine to citrulline at the inner root sheath and medulla of hair follicles.
TCHH = 629.334 Hz (F)

TNF-alpha
Tumor necrosis factor (TNF, cachexin, or cachectin, and formerly known as tumor necrosis factor alpha or TNFalpha) is an adipokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. It is produced chiefly by activated macrophages (M1), although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells and neurons. The primary role of TNF is in the regulation of immune cells. TNF, being an endogenous pyrogen, is able to induce fever, apoptotic
cell death, cachexia, inflammation and to inhibit tumorigenesis and viral replication and respond to sepsis via IL1 & IL6 producing cells. Dysregulation of TNF production has been implicated in a variety of human diseases including Alzheimer's disease, cancer, major depression[4] and inflammatory bowel disease (IBD). It has a number of actions on various organ systems, generally together with IL-1 and Interleukin-6 (IL-6):
On the hypothalamus:
Stimulation of the hypothalamic-pituitary-adrenal axis by stimulating the release of corticotropin releasing hormone (CRH). Suppressing appetite. Fever
On the liver: stimulating the acute phase response, leading to an increase in C-reactive protein and a number of other mediators. It also induces insulin resistance by

promoting serine-phosphorylation of insulin receptor substrate-1 (IRS-1), which impairs insulin signaling. It is a potent chemoattractant for neutrophils, and promotes the expression of adhesion molecules on endothelial cells, helping neutrophils migrate.

On macrophages: stimulates phagocytosis, and production of IL-1 oxidants and the inflammatory lipid Prostaglandin E2 (PGE2).

On other tissues: increasing insulin resistance. This mechanism occurs as TNF phosphorylates serine residues on the insulin receptor causing signal to stop at the cell surface.

A local increase in concentration of TNF will cause the cardinal signs of Inflammation to occur: heat, swelling, redness, pain and loss of function. Whereas high concentrations of TNF induce shock-like symptoms, the prolonged exposure to low concentrations of TNF can result in cachexia, a wasting syndrome. This can be found, for example, in cancer patients. TNF promotes the inflammatory response, which, in turn, causes many of the clinical problems associated with autoimmune disorders such as rheumatoid arthritis, ankylosing spondylitis, inflammatory bowel disease, psoriasis, hidradenitis suppurativa and refractory asthma. These disorders are sometimes treated by using a TNF inhibitor.

TNF-alpha = 469.706 Hz (F)

TP53

Tumor protein p53, also known as p53, cellular tumor antigen p53, phosphoprotein p53, or tumor suppressor p53, is a protein that in humans is encoded by the TP53 gene. The p53 protein is crucial in multicellular organisms, where it regulates the cell cycle and, thus, functions as a tumor suppressor, preventing cancer. As such, p53 has been described as "the guardian of the genome" because of its role in conserving stability by preventing genome mutation. Hence TP53 is classified as a tumor suppressor gene. p53 has many mechanisms of anticancer function, and plays a role in apoptosis, genomic stability, and inhibition of angiogenesis. In its anti-cancer role, p53 works through several mechanisms:

It can activate DNA repair proteins when DNA has sustained damage. Thus, it may be an important factor in aging.

It can arrest growth by holding the cell cycle at the G1/S regulation point on DNA damage recognition (if it holds the cell here for long enough, the DNA repair proteins will have time to fix the damage and the cell will be allowed to continue the cell cycle).

It can initiate apoptosis - programmed cell death - if DNA damage proves to be irreparable.

tp53 becomes activated in response to myriad stressors, including but not limited to DNA damage (induced by either UV, IR, or chemical agents such as hydrogen peroxide), oxidative stress, osmotic shock, ribonucleotide depletion, and deregulated oncogene expression. If the TP53 gene is damaged, tumor suppression is severely reduced. People who inherit only one functional copy of the TP53 gene will most likely develop tumors in early adulthood, a disorder known as Li-Fraumeni syndrome. The TP53 gene can also be damaged in cells by mutagens (chemicals, radiation, or viruses), increasing the likelihood that the cell will begin decontrolled division. More than 50 percent of human tumors contain a mutation or deletion of the TP53 gene. Increasing the amount of p53, which may initially seem a good way to treat tumors or

prevent them from spreading, is in actuality not a usable method of treatment, since it can cause premature aging. Certain pathogens can also affect the p53 protein that the TP53 gene expresses. One such example, human papillomavirus (HPV), encodes a protein, E6, which binds to the p53 protein and inactivates it. This, in synergy with the inactivation of another cell cycle regulator, pRb, by the HPV protein E7, allows for repeated cell division manifested in the clinical disease of warts. Certain HPV types, in particular types 16 and 18, can also lead to progression from a benign wart to low or high-grade cervical dysplasia, which are reversible forms of precancerous lesions. Persistent infection of the cervix over the years can cause irreversible changes leading to carcinoma in situ and eventually invasive cervical cancer. In healthy humans, the p53 protein is continually produced and degraded in the cell.
TP53 = 799.564 Hz (D)

TRPM8
Transient receptor potential cation channel subfamily M member 8 (TRPM8), also known as the cold and menthol receptor 1 (CMR1), is a protein that in humans is encoded by the TRPM8 gene. The TRPM8 protein is expressed in sensory neurons, and it is activated by cold temperatures and cooling agents, such as menthol and icilin. The transient receptor potential channel (TRP) superfamily, which includes the menthol (TRPM8) and capsaicin receptors (TRPV1), serve a variety of functions in the peripheral and central nervous systems.
In the peripheral nervous system, TRPs respond to stimuli from temperature (below 26 °C), pressure, inflammatory agents, and receptor activation. Central nervous system roles of the receptors include neurite outgrowth, receptor signaling, and excitoxic cell death resulting from noxious stimuli. Application of menthol to skin or mucus membranes results directly in membrane depolarization, providing evidence for the role of TRPM8 and other TRP receptors to mediate our sensory interaction with the environment in response to cold in the same way as in response to menthol. It is hypothesized the TRPV1 and TRPM8 receptors act together in response to inflammatory conditions: TRPV1, increases the burning sensation of pain, while the acidity inhibits TRPM8 to block the more pleasant sensation of coolness in more dire instances of pain.
TRPM8 sensitization increases the sensation of cold pain, also known as cold hyperalgesia. Menthol sensitizes cold-sensitive peripheral C nociceptors and activates cold-specific A delta fibers. Testing involving administration of menthol and nicotine-containing cigarettes non-smokers, which induced what they classified as an irritant response, after initial sensitization, showed a declining response in subjects over time, lending itself to the incidence of desensitization. Studies about Capsaicin and Menthol showed three significant conclusions about cross-desensitizing:
1) Both chemicals self-desensitize,
2) menthol receptors can desensitize in response to capsaicin, and, most novelly,
3) capsaicin receptors are desensitized in response to menthol.
Cold-patches have traditionally been used to induce analgesia or relief in pain which is caused as result of traumatic injuries. The lack of functional TRPM8 gene expression severely impairs ability to detect cold temperatures and diverse aspects of cold

signaling, including cool and noxious cold perception, injury-evoked sensitization to cold, and cooling-induced analgesia.
TRPM8 = 860.390 Hz (F)

TRPV1
The transient receptor potential cation channel subfamily V member 1 (TrpV1), also known as the capsaicin receptor and the vanilloid receptor 1, is a protein that, in humans, is encoded by the TRPV1 gene. It was the first isolated member of the transient receptor potential vanilloid receptor proteins that in turn are a sub-family of the transient receptor potential protein group. This protein is a member of the TRPV group of transient receptor potential family of ion channels.
The function of TRPV1 is detection and regulation of body temperature. In addition, TRPV1 provides sensation of scalding heat and pain (nociception). The best-known activators of TRPV1 are: temperature greater than 43 °C; acidic conditions; capsaicin, the irritating compound in hot chilli peppers; allyl isothiocyanate, the pungent compound in mustard and wasabi. The activation of TRPV1 leads to a painful, burning sensation. Its endogenous activators include: low pH (acidic conditions), the endocannabinoid anandamide, and N-arachidonoyl-dopamine. TRPV1 receptors are found mainly in the nociceptive neurons of the peripheral nervous system, but they have also been described in many other tissues, including the central nervous system.
The sensitivity of TRPV1 to noxious stimuli, such as high temperatures, is not static. Upon tissue damage and the consequent inflammation, a number of inflammatory mediators, such as various prostaglandins and bradykinin, are released. These agents increase the sensitivity of nociceptors to noxious stimuli. This manifests as an increased sensitivity to painful stimuli (hyperalgesia) or pain sensation in response to non-painful stimuli (allodynia). Upon prolonged exposure to capsaicin, TRPV1 activity decreases, a phenomenon called desensitization.
Desensitization of TRPV1 is thought to underlie the paradoxical analgesic effect of capsaicin. As a result of its involvement in nociception, TRPV1 has been a prime target for the development of novel pain reducers (analgesics). TRPV1 is also expressed at high levels in the central nervous system and has been proposed as a target for treatment not only of pain but also for other conditions such as anxiety. Furthermore, TRPV1 appears to mediate long-term depression (LTD) in the hippocampus. LTD has been linked to a decrease in the ability to make new memories, unlike its opposite long-term potentiation (LTP), which aids in memory formation.
TRPV1 = 639.840 Hz (F)

TRPV2
Transient receptor potential cation channel subfamily V member 2 is a protein that in humans is encoded by the TRPV2 gene. This gene encodes an ion channel that is activated by high temperatures above 52 °C. The protein may be involved in transduction of high-temperature heat responses in sensory ganglia. It is thought that in other tissues the channel may be activated by stimuli other than heat. TRPV2 is expressed in afferent nociceptors, pain sensing neurons, where they act as transducers of thermal and chemical stimuli. TRPV2 is activated by high temperatures above 52 °C. Alternatively it can be activated at lower temperatures by chemicals, such as the

research tool 2-APB, the plant cannabinoid cannabidiol, and probenecid. It is blocked by ruthenium red and lanthanum.
TRPV2 = 579.275 Hz (F)

VCAM1
Vascular cell adhesion protein 1 also known as vascular cell adhesion molecule 1 (VCAM-1) or cluster of differentiation 106 (CD106) is a protein that in humans is encoded by the VCAM1 gene. VCAM-1 functions as a cell adhesion molecule. The VCAM-1 protein mediates the adhesion of lymphocytes, monocytes, eosinophils, and basophils to vascular endothelium. It also functions in leukocyte-endothelial cell signal transduction, and it may play a role in the development of atherosclerosis and rheumatoid arthritis. Certain melanoma cells can use VCAM-1 to adhere to the endothelium, and VCAM-1 may participate in monocyte recruitment to atherosclerotic sites. As a result, VCAM-1 is a potential drug target.
VCAM1 = 547.520 Hz (F)

VEGFC
Vascular endothelial growth factor C is a VEGF. The human gene encoding it is VEGFC. The protein encoded by this gene is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF)
family, is active in angiogenesis, lymphangiogenesis and endothelial cell growth and survival, and can also affect the permeability of blood vessels. Mutations in VEGFC cause Milroy disease. Lymphedema is caused by overexpression of VEGF-C, leading to an imbalance between lymphatic vessel formation and absorption.
VEGFC = 858.840 Hz (F)

WNT
The Wnt signaling pathways are a group of signal transduction pathways made of proteins that pass signals from outside of a cell through cell surface receptors to the inside of the cell. Three Wnt signaling pathways have been characterized: the canonical Wnt pathway, the noncanonical planar cell polarity pathway, and the noncanonical Wnt/calcium pathway. All three Wnt signaling pathways are activated by the binding of a Wnt-protein ligand to a Frizzled family receptor, which passes the biological signal to the protein Dishevelled inside the cell. Wnt signaling was first identified for its role in carcinogenesis, but has since been recognized for its function in embryonic development. The embryonic processes it controls include body axis patterning, cell fate specification, cell proliferation, and cell migration. These processes are necessary for proper formation of important tissues including bone, heart, muscle and hair follicles. The clinical importance of this pathway has been demonstrated by mutations that lead to a variety of diseases, including breast and prostate cancer, glioblastoma, type II diabetes, and others.
In magnitude order,
WNT10a - 851.193 Hz
WNT2b - 802.204 Hz
WNT10b - 788.108 Hz
WNT5a - 775.782 Hz

WNT1 - 751.051 Hz
WNT16 - 745.644 Hz
WNT2 - 740.685 Hz
WNT9a - 738.889 Hz
WNT5b - 738.815 Hz
WNT6 - 727.938 Hz
WNT3 - 726.276 Hz
WNT3a - 721.252 Hz
WNT7b - 720.710 Hz
WNT11 - 718.022 Hz
WNT4 - 715.593 Hz
WNT7a - 714.799 Hz
WNT9b - 714.771 Hz
WNT8a - 711.687 Hz
WNT8b - 709.543 Hz
(all in F key)
WNTLESS
G protein-coupled receptor 177 (GPR177), commonly known as Wntless, is a human gene that encodes a receptor for Wnt proteins
in Wnt-secreting cells.
Wntless was recently shown to be a cargo for the retromer complex. It has been found essential for hair follicle induction. Gpr177
controls skeletal development through modulation of autocrine and paracrine Wnt signals. It also functions in mature osteoblasts to
regulate bone mass.
WNTLESS = 419.505 Hz (E)

1.3.1.6 RT-MB-03

https://archive.org/details/Resonant_Therapy-Molecular_Biology_03

ATP Passive Training, ATP Synthases, Actinic Keratosis Gene Therapy, Angiogenesis Gene Therapy, Anti-Aging Body Contour Gene Therapy, Anti-Aging Detox-Antioxidant Gene Therapy, Cardiac Hypertrophy Gene Therapy, Chondrocalcinosis Gene Therapy, Endogenous Antioxidant Enzymes, Hernia Hiatal Gene Therapy, Hyperfibrinolysis Gene Therapy, NO Synthases, Post-Herpetic Neuralgia Gene Therapy, Seborrheic Keratoses Gene Therapy, Skin Cellulite Gene Therapy, Skin Firming Gene Therapy, Skin Inflammation Gene Therapy, Skin Moisturizing Gene Therapy, Skin Peptides, Skin Structure Protection-Maintenance Gene Therapy, Stasis Dermatitis Gene Therapy, Thermotolerance Gene Therapy, Venous Insufficiency Gene Therapy, Weight Loss Peptides,

* ATP passive training, a sequence of frequencies featuring 3 passes of O2 (oxygen2)

1m, EPO (erythropoietin) 3m, and ATP (adenosine triphosphate) 3m.

* ATP synthases. Adenosine triphosphate (ATP) is a nucleoside triphosphate used in cells as a coenzyme. ATP transports chemical energy within cells for metabolism. It is one of the end products of photophosphorylation, cellular respiration, and fermentation and used by enzymes and structural proteins in many cellular processes, including biosynthetic reactions, motility, and cell division. It is the main energy transfer molecule in the cell, that is, the intermediary molecule between energy-yielding (exergonic) and energy-requiring (endergonic) reactions. ATP synthase is an important enzyme that provides energy for the cell to use through the synthesis of adenosine triphosphate (ATP). The recording includes the sound frequencies for both the ATP (coenzyme) and those human genes encoding components of ATP synthases. All the frequencies play for 90 seconds unless stated otherwise. In order, ATP (1m), ATP6AP1, ATP5H, ATP5D, ATP5E, ATP5G3, ATP5G2, ATP6AP2, ATP5G1, ATP5J, ATP5L, ATP5J2, ATP5F1, ATP, ATP5S, MT-ATP6, ATP5O, ATP5A1, MT-ATP8, ATP5I, ATP5B, ATP (1m).

* Actinic keratosis gene therapy. Actinic keratosis (also called "solar keratosis" and "senile keratosis") is a premalignant condition of thick, scaly, or crusty patches of skin. It is more common in fair-skinned people and it is associated with those who are frequently exposed to the sun, as it is usually accompanied by solar damage. The recording emphasizes factors that affect maturation of keratinocytes. In playing order, MMP12 (1m), HRAS iso 2 (1m), SDHD (1m), TLR7 (3m), TP53 (2m), PARP1 (1m), NADP (2m), NAD (2m), TYMS iso1 (1m), Afamelanotide (2m), TYMS iso 2 (1m), TYMS iso 3 (1m), GSTM1 iso 1 (1m), NFE2L2 iso 1 (1m), EDN1 (1m), NFE2L2 iso 2 (1m), NFE2L2 iso 3 (1m), BAK1 (2m), HRAS iso 1 (1m), GSTM1 iso 2 (1m), Fluorouracil (3m), Nicotinamide (2m).

* Angiogenesis gene therapy. Angiogenesis is the growth of new blood vessels from the existing vasculature. Angiogenic therapies, designed to control the growth and regression of blood capillaries, are used to improve the survival of poorly perfused tissues that are essential to the body and to rid the body of unwanted tissues. Each frequency plays for 1m. In order, NOS3, PLAU, FGF1, PDGFR, SERPINE1, TGF-Beta1, ID1, EPHB2, ITGAV, ITGA5, EPHB3, EPHB1, EPHB4, EPHA2, NRP1, PROM1, ID3, PLG, ITGB5, CDH5, Urokinase, FGF2, PECAM1, CCL2, PDGFB, VEGF, ENG, MT-CO2, EFNA1, FGF10, PLAT, FGF7, ANG1, ANG2, TGFBR1, VEGFR, Histamine.

* Anti-aging body contour gene therapy. Sound frequencies of a diverse group of genes important in body skin structure and appearance. Since aging is multifactorial, the focus here is in genes involved in skin structure and appearance as well as lipid metabolism. (Source: Nu Skin) In playing order, COL4A3 iso 3 (1m), APOJ (2m), COL4A3 iso 4 (1m), COL1A1 (1m), COL4A3 iso 5 (1m), COL1A2 (1m), COL4A1 iso 2 (1m), SIRT3 iso 1 (1m), SIRT5 iso 1 (1m), SIRT5 iso 2 (1m), SIRT5 iso 3 (1m), AQP3 (2m), HAS3 iso 2 (1m), SIRT3 iso 2 (1m), ELANE (2m), Adenosine triphosphate (2m), TXNRD1 (2m), SOD2 (2m), HAS1 (2m), HAS3 iso 1 (1m), TIMP1 (2m), COL4A2 (1m), HSPE (2m), COL4A3 iso 1 (1m), COL4A1 iso 1 (1m), SIRT5 iso 4 (1m), COL4A3 iso 2 (1m), COX1 (2m).

* Anti-aging detox-antioxidant gene therapy. This recording includes a panel of 8 genes representative of the Nrf2 and infammatory pathways. Nrf2 is a transcription factor that regulates the basal and inducible expression of a large battery of genes encoding for cytoprotective factors including those that defend against electrophilic stressors and oxidative insults (age-related pathways). (Source: Nu Skin) In playing order, GSR iso 2 (1m), GSR cytoplasmic (1m), UGT1A6 iso 3 (1m), GSR iso 3 (1m), NOS2 iso 1 (1m), GSR iso 4 (1m), NOS2 iso 2 (1m), NQ01 iso 1 (1m), GCLM (3m), UGT1A6 iso 2 (1m), NQ01 iso 2 (1m), GCLC (3m), NQ01 iso 3 (1m), GSTA1 (3m), PTGS2 (3m), NRF2 iso 1 (2m), NRF2 iso 2 (2m), NRF2 iso 3 (2m), UGT1A6 iso 1 (1m), GSR mitochondrial (1m).

* Cardiac hypertrophy gene therapy, addresses age related cardiac hypertrophy. GDF11 is a blood circulating factor that has the ability to reverse cardiac hypertrophy related to aging. GDF11 gene expression and protein abundance decreases with age. Its expression causes youthful regeneration of cardiomyocytes, a reduction in the Brain natriuretic peptide (NPPB) and in the Atrial natriuretic peptide (NPPA). GDF11 also causes an increase in expression of SERCA-2 (ATP2A2), an enzyme necessary for relaxation during diastolic functions. GDF11 activates the TGF-beta pathway in cardiomyocytes derived from pluripotent hematopoietic stem cells and suppresses the phosphorylation of Forkhead (FOX proteins) transcription factors, thus producing an "anti- hypertrophic effect", aiding in the reversal process of age-related hypertrophy, on the cardiomyocytes. KLF4 functions as a negative regulator of cardiac hypertrophy. A shortage of the genetic factor KLF4, which regulates endothelial cells lining the interior of blood vessels, makes the lining more prone to the buildup of harmful plaque, fat deposits and more susceptible to clot formation. Conversely, sufficient levels of KLF4 protect the inner lining of blood vessels from toxins and other harmful agents that trigger the buildup of plaque and clot formation. The recording includes frequencies of pro-hypertrophic Histone deacetylases' (HDACs) inhibitors to reduce NPPA and NPPB expression. The products in playing order, KLF4 (3m), NPPA (2m), GDF11 (5m), ATP2A2 iso 1 (2m), ATP2A2 iso 4 (2m), ATP2A2 iso 3 (2m), ATP2A2 iso 5 (2m), ATP2A2 iso 2 (2m), NPPB (2m), Anantin (2m), Lavendustin A (2m), Trichostatin A (2m), Genistein (2m), Splitomicin (2m).

* Chondrocalcinosis gene therapy, deals with visible calcification of cartilage (both hyaline and fibrocartilage) which is thought to increase with age. Calcium Pyrophosphate Deposition Disease (CPDD), chondrocalcinosis, pseudogout are alternative names that emphasize particular aspects of the clinical or radiographic findings. In theory, any joint may be affected of calcification of hyaline and/or fibrocartilage (knees, wrists, hip, spinal cord, fingers, toes). Calcium pyrophosphate crystal depositions may cause bone spurs, joint inflammation, synovitis, pain and raised white cell count. MV-related proteins involved in regulation of skeletal mineralisation during growth and aging, ALPL, ENPP1, ANKH, PHOSPHO1, and OPN also play a prominent role in mineral deposition. Common prevention and treatment drug frequencies are included in the recording. In playing order, ANKH (5m), ENPP1 (5m), OPN (3m), PHOSPHO1 iso 3 (2m), PHOSPHO1 iso 2 (2m), PHOSPHO1 iso1 (2m), Methotrexate (1m), Colchicine (1m), ALPL (3m), Hydroxychloroquine (1m).

* Endogenous antioxidant enzymes, includes superoxide dismutases, catalase, glutathione peroxidases, glutathione reductase, and glucose-6-phosphate dehydrogenase. Each frequency plays for 1m unless stated otherwise. In order, SOD2 iso 4, GPX4 cytoplasmic, GSR iso 2, GSR cytoplasmic, GSR iso 3, SOD2 iso 3, GSR iso 4, SOD1 (2m), GPX5 iso 2, GPX1 iso 2, SOD3 (2m), GPX5 iso 1, GPX6, SOD2 iso 1, GPX8, G6PD long iso, G6PD iso 3, GPX4 mitochondrial, GPX1 iso 1, CAT (2m), GPX2, G6PD short iso, GPX7, SOD2 iso 2, GSR mitochondrial, GPX3.

* Hernia hiatal gene therapy, plays for 5m each frequency of some associated genes. In order, ABCB1, CYP3A4 and CYP2C19.

* Hyperfibrinolysis gene therapy, addresses acquired disturbance of fibrinolysis (Hyperfibrinolysis). It may occur after trauma or in patients who suffer from an overwhelming activation of tissue factor. Fibrinolysis is a process that prevents blood clots from growing and becoming problematic. The recording includes frequencies for fibrinolytics, fibrinolysis gene factor activators and inhibitors, and plasmin inactivators. Each item plays for three minutes unless stated otherwise. The products used in playing order, SERPINF2, PLAU, CPB2, SERPINB1, SERPINE1, PLAT, A2M, Stanozol, Tranexamic acid, 4-Aminomethylbenzoic acid (2m), Aminocaproic acid (2m).

* NO (nitric oxide) synthases. Nitric oxide levels gradually decline with age. It effects the release of gonadotroptin releasing hormone, as well as the release of adrenaline from the adrenal medulla. Nitric oxide also controls the circulation of blood, transmits messages between nerve cells, and is a mediator of inflammation. Expands blood vessels, controls platelet function, reduces arterial plaque and reduces total cholesterol. NO synthases effect favorably aging-related Erectile Dysfunction in men with poor corporeal relaxation and failure to store blood along with loss of corporeal smooth muscle integrity. The recording includes other gene factors frequencies to increase adenosine production, stimulation of the adenosine receptor that activates increased nitric oxide synthase, activation of the maxi-K channel, and modulation of human corporal smooth muscle. Each frequency plays for three minutes unless stated otherwise. In playing order, KCNMA1, NOS3, NOS2, PTGES, ADORA2B, NT5E iso 1 (90s), NNOS, NT5E iso 2 (90s).

* Post-herpetic neuralgia gene therapy, the frequencies of products and gene factors for relief. In playing order, Tanezumab (4m), CALCA (2m), TRPV1 (2m), SCN3A iso 3 (2m), SCN3A iso1 (2m), SCN3A iso 4 (2m), SCN3A iso 2 (2m), SCN10A (2m), GRIN2B (2m), IL10 (2m), NMDA (4m).

* Seborrheic keratoses gene therapy. Seborrheic keratosis (also known as "seborrheic verruca," and "senile wart" is a noncancerous benign skin growth that originates in keratinocytes. Like liver spots, seborrheic keratoses are seen more often as people age. A mutation of a gene coding for growth factor receptor FGFR3, has been associated with seborrheic keratosis. Gene factors included promote proliferation of keratocytes to prevent differentiation as a regulatory means to fight lesions. The recording includes

frequencies for cholera toxin, methotrexate and vitamin A. In playing order, TGF alpha (3m), FGFR3 iso 2 (2m), FGFR3 iso 1 (2m), FGFR3 iso 4 (2m), TP63 (3m), FGFR3 iso 3 (2m), Methotrexate (3m), Colera toxin (3m), Vitamin A (2m).

* Skin cellulite gene therapy. Cellulite can be located anywhere on the body containing subcutaneous fat. Cellulite's appearance is due to herniations of subcutaneous fat into the reticular and papillary dermis. (Source: Nu Skin) In playing order, HP (150s), AGTR1 (150s), HIF1A iso 3 (120s), HIF1A iso 1 (120s), HIF1A iso 2 (120s), VEGFA (150s), ADRA1D (150s).

* Skin firming gene therapy. The loss of skin structure or elasticity is usually one of the first and most noticeable signs of skin aging. Firm skin is physically taut, having few visible wrinkles and high elasticity. (Source: Nu Skin) AR - Androgen Receptor - Collagen breakdown FOS - FBJ murine osteosarcoma viral oncogene homolog - Promotes MMP's IL1alpha - Interleukin 1 Alpha - Induced collagenase JUN - JUN proto-oncogene - Promotes MMP's MMP9 - Metalloproteinase 9 - Degrades collagen gene NFKbeta - Nuclear Factor Kappa Beta - Diverse effects PDGFA - Platelet-derived growth factor subunit A - UV induced collagenase TP53 - Tumor protein p53 - Suppressor of collagen gene. In playing order, NFKB2 iso 3 (80s), TP53 (3m), FOS (3m), NFKB1 iso 2 (80s), NFKB1 iso 1 (80s), AR (3m), JUN (3m), NFKB iso 1 (80s), NFKB iso 4 (80s), NFKB1 iso 3 (80s), IL1 Alpha (3m), MMP9 (3m), PDGFA long (2m), PDGFA short (2m).

* Skin inflammation gene therapy. Skin infammation is regulated by multiple pathways and infammatory mediators. The activation and/or deactivation of certain mediators can infuence how the skin responds to certain irritants. When inflammation occurs pro-inflammatory factors are up-regulated while anti-inflammation gene factors may be downregulated. To maintain proper homeostasis of the skin, pro-inflammatory targets should be downregulated and anti-inflammatory targets up-regulated. (+) IL1RN, (-) ERBB2 inhibitor AG-825, (+) MT2A, (+) MT1H, (-) PTAFR i nhibitor PCA-4248, (-) LTB4R inhibitor Acebilustat, (+) ICAM2, (-) HRH1 inhibitor UCB-35440. (Source: Nu Skin) (Updated 28/1/20).

* Skin moisturizing gene therapy. Some genes important for the skin barrier omeostasis, transepidermal water loss, and the formation of barrier lipids, i.e., cholesterol, free fatty acids and ceramides. Each item plays for three minutes. In playing order, ACACB, ALOXE3, ALOXE12B, SMPD1, SPTLC2, GBA, PPARG, HMGCS1. (Source: http://www.ncbi.nlm.nih.gov/pubmed/19466436#)

* Skin peptides. Each item plays for 4m 30s unless stated otherwise. In order, - Acetyl hexapeptide-3 works to relax the deep wrinkles and lines around the forehead and eyes. - Palmitoyl pentapeptide-3 increases overall collagen production, the production of collagen IV and hyaluronic acid synthesis in the skin. Palmitoyl pentapeptide-3 also helps the skin to heal wounds faster. - Palmitoyd oligopeptide stimulates the synthesis of collagen and hyaluronic acid in the deep layers of the skin. In addition, palmitoyl oligopeptide has a mild UV protection effect. - Palmitoyl tetrapeptide-7 lightens skin and

improves its elasticity, reduces problems with skin roughness, fine lines, thin skin and wrinkles, and the appearance of uneven skin tones. It also induces natural collagen production for skin healing and rejuvenation. Palmitoyl tetrapeptide 7 relieves some of the chemical pressure on the skin, leading to cell deterioration from inflammation, and allows it to heal faster. - L-gulonolactone oxidase (vitamin C gene) provides the vitamin C used by fibroblasts to make collagen and elastin. Vitamin C is also an antioxidant which has a photoprotective effect by reducing damage to cells and DNA which are caused by oxidation from UV light exposure (3m 18s).

* Skin structure protection and maintenance gene therapy. Gene expression changes accompany skin aging and contribute to the formation of noticeable signs of aging such as the formation of fine lines, wrinkles, and sagging skin. In the aging dermis, there are increases in expression of genes responsible for degrading key components of the extracellular matrix (ECM), while there are decreases in gene expression responsible for key components that build and/or contribute to ECM formation. Thus, more breakdown of ECM occurs than formation. Each product plays for three minutes unless stated otherwise. In playing order, COL4A3 iso 3 (1m), COL4A3 iso 4 (1m), ERBB2, SIRT1, COL4A3 iso 5 (1m), LOX, TGM1, SOD2, TIMP1, COL4A3 iso 1 (1m), COL4A3 iso 2 (1m), HRH1. (Source: Nu Skin)

* Stasis dermatitis gene therapy. Frequencies related to the condition according to Novus Biologicals search. Each item play for 3m. In order, PDGFRB, AP3B1, BLOC1S2, MAS1, FGF2, CRP c-reactive protein, TIMP1, PLAT, FLT4.

* Thermotolerance gene therapy. Heat-shock transcription factors (HSFs) activate heat-shock response genes under conditions of heat or other stresses. Each item plays for 3m. In order, HSF4 iso B, HSF1 short, HSF4 iso A, HSF2 iso 1, HSF2 iso 2, HSF1 long.

* Venous insufficiency gene therapy. Veins are the blood vessels of the body that return blood from the arms, legs, and organs back to the heart. Venous insufficiency is a condition in which the veins have problems sending blood from the legs back to the heart. This abnormal blood flow can cause local damage, damage to affected legs, or death. In playing order, MMP12 (2m), BAT1 iso 2 (90s), BAT1 iso1 (90s), PAI1 iso 1 (90s), SDC4 iso 2 (90s), PAI1 iso 2 (90s), NDP (2m), HFE (2m), FGFR2 (2m), F13A1 (2m), MTHFR iso 2 (90s), MTHFR iso1 (90s), TNF-alpha (2m), ESR1 (2m), SLC40A1 (2m), THBD (2m), ESR2 (2m), SDC4 iso1 (90s).

* Weight loss peptides. Each item plays for 3 minutes. In playing order, - Adipotide cuts off blood supply to fat cells causing them to die. - Hexarelin is a synthetic hexaptide which has GH-releasing properties. Effects from GH include increased bone mineral density, increased muscle mass, fat loss, connective tissue strengthening, and improved skin elasticity. GH secretion also leads to the liver secreting more IGF-1 (Insulin-Like Growth Factor One), which by itself has a host of effects similar to GH. - Tesamorelin is a stabilized analogue of the growth hormone-releasing factor (GRF). It reduces abdominal fat and boosts cognition in elderly. - The (hgH fragment 176-191) exhibits the ability to burn through stubborn adipose tissue, while increasing energy

expenditure, muscle mass, and fat oxidation. - Hgh fragment 177-191 is a stabilized analogue of the growth hormone-releasing factor (GRF) used to build lean muscle while burning excess fat. - CJC-1295 DAC is a long acting Growth Hormone Releasing Hormone, which causes the anterior pituitary to release more growth hormone. GHRH is released in pulses in the body, which alternate with corresponding pulses of somatostatin (growth-hormone inhibiting-hormone). - TRH (Thyrotropin Releasing Hormone), besides adjusting thyroid hormones, is able to reverse and abrogate aging related adiposity and correct aging-related hormonal alterations by acting directly on the hormones regulating fat stores. TRH also produces a rapid mobilization of triglycerides in the blood, a decrease of leptin and consequently a rapid loss of body weight. In addition corrects typical aging-related degenerative processes, such as reversal of testis atrophy, or pancreas and kidney dysfunction.

1.3.1.7 RT-MB-04

https://archive.org/details/Resonant_Therapy-Molecular_Biology_04

AICAR Peptide-1, Acute Hemorrhagic Conjunctivitis Vaccine, Alpha-MSH Peptide, Autoimmune Lupus Erythematosus Epitope 1 Peptide, Delta Sleep-Inducing Peptide, Ebola Peptides, Ebola Vaccine, Forskolin, GHK-Copper Peptide, Glucagon Like Peptide-1, Hemostasis Peptides, Influenza Peptides, Iron Chelation-Glucagon Like Peptide 1, Iron Chelator-PCIH, Ischemia-Reperfusion Injury Molecular Therapy, MHC-Related Peptides, Mechano Growth Factor Peptides, Melanotan-1 Peptide, Melanotan-2 Peptide, Natriuretic Peptides, Nootropic Peptides, Orexin Antagonist Peptides, Orexin Peptides, Physical Performance-Injury Healing Peptides, Sperm Activating Peptide, Tofacitinib

* AICAR peptide-1 may be responsible for increased endurance as it boosts energy conversion and makes the entire process happen more efficiently. It also promotes an elevated rate of fat burning because AICAR causes cells to convert energy on a significantly elevated basis. It has an ability to enhance a proper cellular response to insulin secretions. AICAR is thought to be able to reduce the risk of cardiac arrest from occurring, or at the very least, minimizing the resultant damage if it does occur.

* Acute hemorrhagic conjunctivitis vaccine is E-peptide 14-ANTVESEIKAELGVI-28. Enterovirus 70 (EV70) is the causative agent of acute hemorrhagic conjunctivitis (AHC). (http://www.ncbi.nlm.nih.gov/pubmed/23237090)

* Autoimmune lupus erythematosus epitope 1 peptide (PPPGIRGP) induces spliceosome autoimmunity, a mechanism of homeostatic body regulation to maintain balance in a changing environment. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2191871/pdf/je1812453.pdf)

* Alpha-MSH peptide works in a region of the brain known as the hypothalamus to

suppress appetite. It is anti-inflammatory, anti-fever and antimicrobial.

* Delta sleep-inducing peptide (DSIP) promotes deeper, more restful sleep and an improved anabolic environment which fosters vastly improved muscle growth and recovery.

* Ebola peptides. Six scytovirin peptides, griffithsin peptide, E109 peptide, E112 peptide, Tat-Ebo peptide and melatonin. (E109 and E112 peptides http://www.ncbi.nlm.nih.gov/pmc/articles/PMC533931/)(Tat-Ebo peptide http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3091195/)

* Ebola vaccine. A vaccine from immunodominant epitope peptide 98 at amino acids #389-403 (HNTPVYKLDISEATQ) of GP (ZEBOV-GP) http://omicsonline.org/2157-2526/2157-2526-S1-006.php

* Forskolin, a labdane diterpene produced by the Indian Coleus plant offers a number of health benefits in weight loss, intraocular pressure, UV protection, tanning, urinary tract infections, nerve repair and more. (updated Nov 4, 2014)

* GHK-Copper peptide has skin anti-inflammatory properties, also can reduce UV-induced erythema. GHK-Cu's has the ability to restore function of irradiated fibroblasts to that of intact cells after radioactive cancer treatment. GHK promotes nerve regeneration, increased axon count and proliferation of Schwann cells. Facilitates wound healing, causing better wound contraction, faster development of granular tissue and improved angiogenesis. It also elevates the level of antioxidant enzymes. It is able to recover epidermal stem cells and increase their ability to repair tissue. GHK-Cu is able to reverse the expression of certain genes involved in metastatic spreading of colon cancer. Genomic research suggests that GHK directly modulates gene expression, which may explain the diversity of its biological actions. In smokers, GHK can downregulate genes involved in lung destruction and inflammation, while upregulating genes involved in tissue repair, restorimg their ability to remodel collagen and assemble it into properly organized fibrils. Several controlled facial studies confirmed anti-aging, firming and anti-wrinkle activity of copper peptide GHK-Cu.

* Glucagon like peptide-1. A potent stimulator of glucose-dependent insulin release. Plays important roles on gastric motility and the suppression of plasma glucagon levels. May be involved in the suppression of satiety and stimulation of glucose disposal in peripheral tissues, independent of the actions of insulin. Have growth-promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin secretion. Increases islet mass through stimulation of islet neogenesis and pancreatic beta cell proliferaton. Inhibits beta cell apoptosis.

* Hemostasis peptides, targets the cascade of events that occur when blood is present outside the blood vessels such as in Peripheral Arterial Disease or Venous Insufficiency. Each product plays for three minutes eighteen seconds. In playing order, - RPI peptide -

Prenyl Protein Inhibitor -anti-inflammatory - Hannahpep peptide - fibrinolytic - Vasoactive intestinal polypeptide (VIP) - vasodilator - MMP-9 Peptide Inhibitor - metalloproteinase 9 inhibitor - Vasoactive intestinal polypeptide (VIP) - vasodilator - Fibrinogen Binding Inhibitor Peptide - inhibit formation of blood clots - Cilostazol (drug) - intermitent claudication, arterial vasodilator, platelet aggregation inhibitor - AICA-Ribonucleotide peptide (AICAR) - ischemic injury, diabetes

* Influenza peptides. A mix of generic antiviral peptides and influenza virus' hemagglutinin, M2 coat protein, matrix protein and nucleoprotein peptides.

* Iron chelation - glucagon like peptide 1, a combination therapy of iron chelator 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) plus GLP-1 to promote survival of pancreatic beta cells. 2-Pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) is an agent to remove mitochondrial iron deposits. It is also anti-mycobacterial, protects against hydrogen peroxide- mediated cytotoxicity, prevents beta cell destruction, and has neuroprotective properties. Glucagon like peptide 1 active forms' GLP1 7-36 amide and GLP1 7-37 is a potent stimulator of glucose-dependent insulin release. Plays important roles on gastric motility and the suppression of plasma glucagon levels. May be involved in the suppression of satiety and stimulation of glucose disposal in peripheral tissues, independent of the actions of insulin. It has growth- promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin secretion. Increases islet mass through stimulation of islet neogenesis and pancreatic beta cell proliferaton. Inhibits beta cell apoptosis. (updated Nov 4, 2014)

* Iron chelator-PCIH, or iron chelation agent 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) used to remove mitochondrial iron deposits. It is anti-mycobacterial. It also protects against hydrogen peroxide-mediated cytotoxicity and beta cell destruction. PCIH has neuroprotective effect.

* Ischemia-reperfusion injury. After a period of ischemia or lack of oxygen, the tissue damage caused when blood supply returns to the tissue is called reperfusion injury. Each item plays for three minutes, in order - Reteplase (recombinant tPA - clot breakdown) - Peptide P (ameliorates or inhibits damage caused by ischemic events) - Enoxaparin (low molecular weight heparin - anticoagulant) - Endothelin A antagonist peptide FR139317 (inhibition of endothelin-1 - mediated arteriolar vasoconstriction) - CEFH peptide (ischemia, reperfusion injury) - TP9201 peptide (microvascular occlusion) - ATP+O2 (blood oxygen levels) - LSKL peptide, Inhibitor Of Thrombospondin (TSP-1) (two different anti-angiogenesis frequencies) - Tenecteplase (recombinant tPA - clot breakdown) - Caveolin-1 peptide (decreases phosphatidylglycerol levels and blocks calcium- induced keratinocyte differentiation) - Alprostadil (vasodilator, erectile dysfunction, critical limb ischemia drug) - Nifedipine (Hypertension, L-type calcium channel blocker drug) - Desmoteplase (recombinant tPA - clot breakdown) - Pentoxyfilline (Intermittent Claudication, Peripheral Neuropahy drug) - Mesalazine (sulfamide, an anti-inflammatory drug)

* MHC-related peptides help the immune system recognize foreign substances. In addition to their established role in the immune response, peptide ligands of major histocompatibility complex (MHC) molecules constitute a previously unknown family of social recognition signals detected by specific subsets of sensory neurons in the mammalian nose. This sensing of MHC peptides can be viewed as a form of functional genome analysis by the nose. Behavioral studies in mice and fish show that MHC peptides are accepted as olfactory cues that influence mate choice decisions and selective pregnancy failure. These findings provide a molecular mechanism by which an individual can sense the composition and compatibility of vital immune system molecules of a conspecific, with direct consequences for social behavior. Each item plays for four minutes. In order, Alpha-gliadin (57–73), Rnase (90–105), HEL (46-61), E alpha (52–68), MMK-1 amide, 3Kp2 Class II MHC Molecule, PIT (630–641) H+/K+ ATPase alpha chain peptide, NY-ESO-1 (87-111).

* Mechano growth factor peptides. Each item play for five minutes 20 seconds. In order, - MGF, Mechano Growth Factor, an interlaced variant of the insulin growth factor-1 (IGF-1). The RNA form is expressed in muscle tissues in response to the overload or/and damage, therefore it is originally called MGF. Expression of IGF-1 interlaced variants over the course of the healing and re-growth phase of muscle repair is believed to be the primary mechanism by which the body helps to produce new muscle tissue. Failure in its expression may result to age-related loss of skeletal function. Included in its functions is its ability to become a potent neuroprotective. - Enobosarm is a selective androgen receptor modulator (SARM) for treatment of conditions such as muscle wasting and osteoporosis. - PEG MGF (Pegylated Mechano Growth Factor) pegylated splice variant of the IGF-1 gene which increases stem cell count in the muscle and allows for muscle fibers to fuse and mature. This is a process required for growth of adult muscle. (updated Nov 4, 2014)

* Melanotan 1 (MT1) peptide, affects melanogenesis stimulation, for pigmentation of the skin. It biomimicries the natural mammalian tanning process. Melanotan produces its photoprotective effects by triggering a 'signaling cascade' via its activation of the MC1R on melanin-producing cells known as melanocytes. (updated Nov 4, 2014)

* Melanotan-2 peptide, used for erectile dysfunction and obesity-appetite.

* Natriuretic peptides. These bioactive peptides participate in the mechanisms regulating water–electrolyte balance and blood pressure through their natriuretic and vasodilator actions. The recording includes atrial natriuretic peptide, brain natriuretic peptide, C-type natriuretic peptide, plus their homologues Urodilatin, Nesiritide and recombinant CNP. Each item plays for three and a half minutes. In playing order, NANP, recombinant CNP, NBNP, NCNP, Urodilatin, Nesiritide.

* Nootropic peptides, to improve one or more aspects of mental function, such as working memory, motivation, and attention. Each product plays for four minutes and 24 seconds. In order, - Semax heptapeptide - stimulates the Central Nervous System and increases memory, focus, mental and physical performance, and analytical skills -

Davunetide peptide - neuroprotective, enhances cognitive function - Selank peptide - anxiety relief, improved cognitive functioning - Epithalon peptide - aging, life span and spontaneous tumor incidence - Noopept peptide - learning ability, memory, cognitive function disturbance or damage, anxiety, irritability, emotional lability, sleep disorders, immunocorrector, reverses/prevents learned helplessness neurosis.

* Orexin antagonist peptides. Selective orexin receptor antagonists may be used as a therapy to prevent relapse of addictive behavior, anxiety, and sleep insomnia. Each product plays for four minutes. In order, Almorexant HCl dual orexin receptor inhibitor, TCS OX2 29 orexin-2 receptor antagonist, Suvorexant dual orexin receptor inhibitor, SB408124 orexin-1 receptor antagonist.

* Orexin peptides. The neuropeptide orexin-A has been shown to rapidly reverse the neurological effects of sleep deprivation and the mental fatigue deprivation can cause. Orexin is produced in the lateral hypothalamus and has been shown to be deficient during narcoleptic seizures. The mental fatigue or seizures sleep deprivation can cause result from the exhaustion of the peptide orexin, which atonic sleep seems to restore. Atonic sleep results in the cessation of energy to muscle readiness and the increase of energy uptake by vital bodily systems inclusive of brain structure. This process is a means to sustain survival through periods of food deprivation rather than a corrective measure of brain function. Humans are biological species and experience functional breakdown when deprived of sleep because of neurological dependency on a process associated with survival strategies. Orexin-B has similar effects. Each item plays for eight minutes. In order, Orexin-A, Orexin-B.

* Physical performance-injury healing peptides. Each item plays for five minutes ten seconds. In playing order, - Thymosin Beta 4 TB500 peptide can influence the performance of athletes, it also plays an important role in protection, regeneration and remodeling of injured and/or damaged tissues. TB 500 utilizes two mechanisms to promote and expedite healing. First it has a direct effect on Actin. Actin is a hair like substance that surrounds cells. It is responsible for the movement, growth and binding of cells. It plays a crucial role in healing. Second it is responsible for the activation of cells known as progenitor cells. These cells are unique in that they can assimilate with different cell types. They also produce protein and growth factors that promote healing. - Body Protection Compound-157 BPC 157 peptide exhibits the capacity to regulate and control the manner in which the digestive tract can operate. One of the ways that BPC 157 accomplishes this is through safeguarding the endothelium, which is the thin layer of cells that line the blood vessels' interior surface. Another way the peptide carries out regulatory function is by being a key factor in the process of angiogenesis; that is, the process in which new blood vessels are formed from pre-existing blood vessels. This latter process is further bolstered by BPC 157's ability to form granulation tissue; this term references the new connective tissues and tiny blood vessels that develop on the surface of wound, thus making the peptide an important piece to the overall wound healing process. Further studies have also shown that the peptide's inherent functionality allows it to contain anti-inflammatory properties. BPC 157 increases the migration and spreading of tendon fibroblasts. Finally, BPC 157 also increases the

probability of a cell surviving under oxidative stress.

* Sperm activating peptide (SAP) regulates flagellar motility, and induces increases in intracellular Ca2+ concentration that play an actual role in regulation of the flagellar movement. Speract is a sperm-activating peptide (SAP) from sea urchin eggs.

* Tofacitinb is a Disease Modifying Anti-Rheumatic Drug (DMARD), it is an inhibitor of the enzyme janus kinase 3 (JAK3) used for rheumatoid arthritis and alopecia.

1.3.1.8 RT-MB-05

https://archive.org/details/Resonant_Therapy-Molecular_Biology_05

Acetyl Tetrapeptide-2, Adrenomodullin-2 Peptide, Adrenomodullin Peptide, Allergic Rhinitis, Angiotensin (1-7) Peptide, Copper Peptides, Davunetide Peptide, Dornase Alfa Enzyme, Enobosarm Peptide, Epithalon Peptide, Female Sexual Arousal Disorder Peptides, Hair-Skin Care Peptides, KGF Peptides, Lunasin Peptide, Magnoloside A, Mechano Growth Factor Peptide, N-Acetylglucosamine, Nesfatin-1 Peptide, Noopept Peptide, Obestatin (11-23) Peptide, Pegylated Mechano Growth Factor Peptide, Pentosan Polysulfate Sodium, Selank Peptide, Semax Peptide, Tat-Beclin-1 Peptide, Thyrotropin Releasing Hormone (TRH) Peptide, VIP Peptide

* Acetyl Tetrapeptide-2 triggers reparative processes and cellular reactions usually seen in younger skin (compensates for loss of thymopoietin).

* Adrenomodullin-2 peptide is a potent cardiovasucular and renal regulator, also a suppressor for food intake and gastric emptying.

* Adrenomodullin peptide has hypotensive effect, lowers blood pressure.

* Allergic rhinitis and nasal blockage. In order, - Pranlukast is a leukotriene receptor antagonist (LTRA) used as antagonist of bronchospasm caused, principally in asthmatics, by an allergic reaction to accidentally or inadvertently encountered allergens (4m) - Seratrodast a thromboxane A2 (TXA2) receptor (TP receptor) antagonist indicated for asthma, perennial allergic rhinitis, chronic bronchitis and chronic pulmonary emphysema (4m) - Vitamin C gene GULOP (2m) - Pranlukast is a leukotriene receptor antagonist (LTRA) used as antagonist of bronchospasm caused, principally in asthmatics, by an allergic reaction to accidentally or inadvertently encountered allergens (4m) - Seratrodast a thromboxane A2 (TXA2) receptor (TP receptor) antagonist indicated for asthma, perennial allergic rhinitis, chronic bronchitis and chronic pulmonary emphysema (4m) - Vitamin C gene GULOP (3m 18s) (updated Nov 27, 2014)

* Angiotensin (1-7) peptide for antihypertensive effect by stimulating synthesis and release of vasodilator prostaglandins, and nitric oxide and potentiating the hypotensive effects of bradykinin.

* Copper peptides Iamin, Folligen, AHK and GHK. Copper functions as an antioxidant, ridding the body of the harmful negatively charged particles and protecting cells from damage. Copper also promotes the production of collagen, the main component of connective tissues including muscles, ligaments, tendons, bones and skin. Copper also helps the body produce healthy red blood cells, therefore preventing anemia, and plays a role in nerves and immune system. Each item plays for three minutes twelve seconds. In order, AHK, GHK, Folligen, AHK, Iamin.

* Davunetide peptide is able to maintain or revive the transport of proteins and other materials in cells, ameliorating symptoms associated with neurodegeneration. Davunetide may benefit Alzheimer's disease, cognitive impairment associated with schizophrenia, Parkinson's disease and progressive supranuclear palsy (PSP) patients.

* Dornase alfa enzyme. The proteolytic enzyme dornase alfa hydrolyzes the DNA present in sputum/mucus of cystic fibrosis patients and reduces viscosity in the lungs, promoting improved clearance of secretions.

* Enobosarm peptide is a selective androgen receptor modulator (SARM) for treatment of conditions such as muscle wasting and osteoporosis.

* Epithalon peptide slows down of the aging process, prevents age related diseases and ailments, improves bodily functionality, elevates immune system capability and improves mental function.

* Female sexual arousal disorder peptides presents a safe combination to use in women that will only work when combined with sexual stimulation. VIP peptide plus UK-414,495 -a NEP selective inhibitor. Two passes playing four minutes each product -VIP and UK-414,495.

* Hair-skin care peptides. The recording plays each item for three minutes. In order, - Myristoyl Pentapeptide-17 antioxidant, eyelashes and eyebrows growth, stimulates production of keratin, the proteins that form eyebrows and lashes - Decapeptide-3 anti-aging, anti-wrinkle, hair growth, reduces and prevents lines and wrinkles by actively generating new skin cells, involved in normal skin growth, healing and wound repair - Astressin-B peptide for hair growth, hair regrowth, improves the sexual drive - Decapeptide-10 anti-wrinkle, hair growth, skin brightening, reduces and prevents lines and wrinkles by actively generating new skin cells, refines texture glides effectively and lights up skin, helps strengthen hair while stimulating hair follicles to produce a strong hair shaft - Copper Tripeptide-1 anti-aging, anti-wrinkle, anti-hair loss, helps strengthen hair while stimulating hair follicles to produce a strong hair shaft, helps blood circulation in the scalp and revitalizing hair follicles, reduces and prevents lines and wrinkles by actively generating new skin cells - Octapeptide-2 anti-aging, anti-wrinkle, hair growth,

increases cell growth and migration, promotes hair growth by activating the stem cells of hair follicles - CRTH2 antagonist OC000459 airway inflammation, hair loss

* KGF peptides (keratinocyte growth factor). KGF and KGF2 stimulate the repair of injured skin and mucosal tissues by stimulating the proliferation, migration and differentiation of epithelial cells and they have direct chemotactic effects on tissue remodeling. Allegedly used by some Hollywood movie stars. Each item plays for four minutes two different frequencies of the products. In order, KGF-2 (1), KGF-2 (2), KGF (1), KGF (2).

* Lunasin peptide is an immune modulating agent that activates Natural Killer (NK) cells. Lunasin has cancer preventive properties and has direct anti-mitotic effects by inducing apoptosis of transformed cells. It fights leukemia and blocks the inflammation that accompanies such chronic health conditions as diabetes, heart disease, and stroke.

* Magnoloside A ameliorates functional dyspepsia by modulating brain-gut peptides and gut microbiota. (https://doi.org/10.1016/j.lfs.2019.116749)

* Mechano growth factor MGF peptide, is a new interlaced variant of the insulin growth factor-1 (IGF-1). The RNA form is expressed in muscle tissues in response to the overload or/and damage, therefore it is originally called MGF. Recent studies show that the expression of IGF-1 interlaced variants over the course of the healing and re-growth phase of muscle repair is believed to be the primary mechanism by which the body helps to produce new muscle tissue. Failure in its expression may result to age-related loss of skeletal function. Included in its functions is its ability to become a potent neuroprotective.

* N-acetylglucosamine NAG is a monosaccharide derivative of glucose. Used for autoimmune diseases, cartilage biosynthesis, hyaluronan production, hyperpigmentation and as anti-inflammatory.

* Nesfatin-1 is a neuropeptide produced in the hypothalamus of mammals. It participates in the regulation of hunger and fat storage. Increased nesfatin-1 in the hypothalamus contributes to diminished hunger, a 'sense of fullness', and a potential loss of body fat and weight.

* Noopept peptide helps to restore memory and other cognitive functions disturbed as a result of ischemia as well as damage due to hypoxia (a condition in which the body or region of the body is deprived of adequate oxygen supply). Also reduces or vanishes anxiety, irritability, emotional lability and sleep disorders. Reverses and prevents learned helplessness. Noopept is noted for its neuroprotective properties which include an anti-oxidant and anti-inflammatory effect as well as the ability to prevent neuro-toxicity caused by excessive calcium and glutamate.

* Obestatin (11-23) peptide, derived from the ghrelin gene, suppresses food intake, inhibits jejunal contraction, and decreases body-weight gain. The peptide shares the

precursor with a food intake stimulating peptide, ghrelin, but possesses reducing effects on food intake, gut motility and body weight.

* Pegylated mechano growth factor PEG MGF peptide, is a pegylated splice variant of the IGF-1 gene which increases stem cell count in the muscle and allows for muscle fibers to fuse and mature. This is a process required for growth of adult muscle.

* Pentosan polysulfate sodium is a disease modifying osteoarthritis drug (DMAOD). Pentosan polysulfate sodium works like an anticoagulant (blood thinner) that prevents the formation of blood clots. However, it is used to treat bladder pain and discomfort caused by cystitis (bladder inflammation or irritation).

* Selank peptide stabilizes and improves overall mood. It leads to feelings of contentment and well-being. This effect is not sedating, but rather calming. Improves mental clarity and overall enhanced cognitive function. Anhedonia is a condition where someone is not able to experience pleasure. Selank has been shown to help restore the proper functioning of this are of the brain. Helps reducing anxiety of different forms such as generalized anxiety disorder, social anxiety disorder, and even Panic Disorder. It also improves the ability to focus and concentrate, increase mental sharpness, reduce mental fatigue, increase memory and learning capacity, and even improve cognitive functioning when in a sleep deficit.

* Semax peptide. Used as nootropic, neuroprotective, neurogenic and neurorestorative. It can help in the treatment of stroke, transient ischemic attack, memory and cognitive disorders, peptic ulcers, optic nerve disease, and to boost the immune system.

* Tat-beclin-1 peptide induces the autophagy process. Disruption of the autophagy process is implicated in a wide variety of conditions including aging, and diseases, including cancers, neurodegenerative diseases such as Parkinson’s and Alzheimer’s, and infectious diseases such as those caused by West Nile and HIV viruses.

* Thyrotropin releasing hormone (TRH) peptide has age-reversing effects. Helps lower glycemia and triglycerides in blood. TRH is a master hormone responsible not just for helping to adjust thyroid hormones (its principal recognised role), but in helping to recorrect many imbalances throughout the body. TRH supplements have encouraged old animals to: Re-establish spermatogenesis, (reversing the age-related dysfunction of their testes). Correct kidney dysfunction (renal issues). Correct pancreatic dysfunction, (diabetic issues). Act as an anti-cancer and protective agent. Lose significant fat deposits and hence weight.

* VIP peptide is a neuropeptide that is widely distributed in the central and peripheral nervous systems. It is a vasodilator, bronchodilator and smooth muscle relaxant. It modulates the activity of many immune system cell types. It is a mitogen for embryonic sympathetic neurons. Its neuroprotective actions are mediated by the release of activity-dependent neurotrophic factors from glial cells.

1.3.1.9 RT-MB-06

https://archive.org/details/Resonant_Therapy-Molecular_Biology_06

Amyloid-Beta Production Inhibitor, Bone Morphogenetic Protein Receptor-1A Peptide, C-Peptide, Cathelicidin-LL37 Peptide, Cortagen Peptide, EUK-134, Elafin Peptide, Galanin Peptide, Galantide Peptide, Granisetron, KIT Peptide, LEAP-1 Peptide, LEAP-2 Peptide, Lactoferrin-B (17-41) Peptide, Livagen Peptide, Magainin-1 Peptide, Magainin-2 Peptide, Motilin Peptide, N-Acetylcarnosine (NAC), Pancreatic Polypeptide, Pepstatin-A Peptide, Prostamax Peptide, Ruxolitinib, STK11 Peptide, Serrapeptase, Thymogen Peptide, VIP Receptor Antagonist, VIP Vasoactive Intestinal Peptide (6-28), Vilon Peptide

* Amyloid-beta production inhibitor or gamma-Secretase Modulators is an Amyloid-beta production inhibitor. Gamma-Secretase Modulators are useful for Alzheimer's disease.

* BMPR1A Peptide (bone morphogenetic protein receptor, type 1A) defects' are the cause of juvenile polyposis syndrome, Cowden disease and hereditary mixed polyposis syndrome 2, which lead to gastrointestinal, breast, thyroid, endometrial and colon cancers.

* Bioregulator peptides Cortagen, Livagen, Prostamax, Thymogen and Vilon. The functions of cells, tissues, organs and the whole body are tuned by many means among which biologically active peptides occupy a special position. Each cell can produce several different peptides and respond to a whole array of peptide species. Altogether, this forms a tight regulatory network responding to subtle variations in body conditions and contributing to optimisation of body functions. Related research has resulted in the development of an approach to designing of biologically active small peptides. The series of synthetic peptides includes tetrapeptides Epitalon (see Resonant Therapy Molecular Biology 05), Cortagen, Livagen, and Prostamax, which are specific for the pineal gland, brain cortex, liver, and prostate, respectively, and dipeptides Thymogen and Vilon, which are specific for the thymus. (Peptides Cortagen, Prostamax and Vilagen updated to F key, Jan 26th 2015)

* C-Peptide has active properties. It binds to a membrane structure, probably a G-protein coupled membrane receptor, eliciting a rise in intracellular Ca2+ concentration and subsequent activation of at least two enzyme systems, Na+,K+ ATPase and endothelial nitric oxide synthase (eNOS). C-peptide administration leads to increased blood flow in skeletal muscle and skin, diminished glomerular hyperfiltration, reduced urinary albumin excretion and improved nerve function in patients with type 1 diabetes who lack C-peptide, but not in healthy subjects. It has therefore been proposed that it might have therapeutic potential in preventing some of the late complications of diabetes. C-peptide reflects insulin secretion, and the amount of insulin secreted reflects the metabolic needs of the body, i.e. the degree of insulin sensitivity or insensitivity. The body becomes more resistant to insulin with the onset of puberty, and again later in life

when insulin resistance increases because of weight gain or for other reasons. C-peptide secretion by a healthy pancreas thus reflects the insulin requirement of the body.

* Cathelicidin Peptide LL37 is anti-microbial peptide. LL-37 corresponds to aa 134-170 of the human cationic antimicrobial protein 18 (hCAP18). The antimicrobial peptide cathelicidin protects the urinary tract against invasive bacterial infection. It plays an important role in the first line of defense against local infection and systemic invasion of pathogens at sites of inflammation and wounds. It showed potential antimicrobial activities against wide spectrum of microorganisms including Gram-negative and -positive bacteria, and fungi. It had similar antimicrobial abilities against both standard and clinically isolated drug-resistant strains. Cathelicidin-AM could rapidly exert its antibacterial activities.

* EUK 134 is a synthetic superoxide dismutase (SOD)/catalase mimetic that exhibits potent antioxidant activities, and inhibits the formation of beta-amyloid and related amyloid fibril.

* Elafin peptide is active against Pseudomonas aeruginosa and might be active to prevent tissue rejection and minimising ischaemic tissue damage. Studies suggest effectiveness in pulmonary arterial hypertension (PAH), chronic thromboembolic pulmonary hypertension and carcinoma of oesophagus.

* Galanin Peptide contracts the smooth muscle of the gastrointestinal and genito-urinary tract, regulates growth hormone, insulin release, and controls adrenal secretion.

* Galantide Peptide is a galanin antagonist consisting of aa 1-13 of galanin and the C-terminal fragment of bradykinin. Galantide reversibly blocks the neuronal activities of galanin. Galanin has different activities such as contraction of smooth muscle of the gastrointestinal and genito-urinary tract, regulation of growth hormone and insulin release, and control of adrenal secretion.

* Granisetron is antinauseant, antiemetic agent, slows colonic transit, and Rotavirus induced diarrhoea.

* KIT Peptide defects' are a cause of piebaldism (lack of melanocytes), gastrointestinal stromal tumors and testicular tumors.

* Liver expressed antimicrobial peptides 1 and 2 - (LEAP-1)(LEAP-2) have antimicrobial effect against both Gram-positive and Gram-negative bacteria as well as yeast, these peptides are involved in the regulation of iron homeostasis.

* Lactoferrin-B (residues 17 to 41) are released by pepsinolysis of human and bovine lactoferrin, respectively, and may have more potent antibacterial activity than the native proteins.

* Magainin 1 and Magainin 2 amide are have broad-spectrum, non-specific activity against a wide range of micro-organisms, including viruses, gram-positive and gram-negative bacteria, protozoa, yeasts and fungi, and may also be hemolytic and cytotoxic to cancer cells. Magainin 1 is a bactericide. Both Magainin 1 and 2 exhibit inhibitory action toward Herpes simplex virus type 1(HSV-1) and HSV-2.

* Motilin peptide is important for interdigestive gastrointestinal motility and indirectly causes the contraction of duodenal and colonic smooth muscle.

* N-Acetylcarnosine (NAC) is found in a variety of tissues but particularly muscle tissue. It has activity as a free radical scavenger. NAC is active against lipid peroxidation in the different parts of the lens in the eye. It is the active ingredient of eye drops used in order to prevent or treat cataracts and ophthalmic disorders associated with oxidative stress, including age-related or diabetic cataracts.

* Pancreatic Polypeptide regulates pancreatic and gastrointestinal functions.

* Pepstatin-A peptide is an inhibitor of acid proteases (aspartyl peptidases). It forms a 1:1 complex with proteases such as pepsin, renin, cathepsin D, bovine chymosin, and protease B (Aspergillus niger). The inhibition is highly selective and does not affect thiol proteases, neutral proteases, or serine proteases.

* Ruxolitinib is a JAK1 and JAK2 Inhibitor a small-molecule ATP mimetic that inhibits both JAK1 and JAK2, results in a dramatic decrease in levels of inflammatory cytokines, IL-6 and TNF-alpha. Ruxolitinib is clinically used for the treatment of myelofibrosis, a bone marrow disorder, and is being investigated for the treatment of certain cancers and autoimmune diseases, such as psoriasis. It may also help growing eyelashes.

* STK11 Peptide defects' are a cause of predisposition to benign and maligant tumors including gastrointestinal and testicular cancers (Peutz-Jeghers syndrome).

* Serrapeptase proteolytic enzyme digests inflammations, scars (non-living tissue), blood clots, cysts, and arterial plaque and inflammation in all forms. Serrapeptase helps treat arterial blockage, protects against stroke and is reportedly more effective and quicker than EDTA Chelation treatments in removing arterial plaque.

* VIP receptor antagonist (4Cl-D-Phe6, Leu17)-VIP used for Rotavirus induced diarrhoea.

* VIP Vasoactive Intestinal Peptide (6-28) VIP antagonist VIP6–28 ameliorates joint mec hanosensitivity in osteoarthritis (OA).

1.3.1.10 RT-MB-07

https://archive.org/details/Resonant_Therapy-Molecular_Biology_07

AG-490 Peptide, AM-111 Peptide, Astressin-2B Peptide, Astressin Peptide, Atrial Natriuretic Peptide-ANP, Beta Defensin-1 Peptide, Beta Defensin-2 Peptide, Beta Defensin-3 Peptide, Beta Defensin-4 Peptide, Betahistine Dihydrochloride, Betahistine Mesilate, Bradykinin Peptide, CJC-1295-DAC Peptide, Calcitonin Peptide, Colivelin Peptide, DG-AVP Peptide, FGF-20 Recombinant, GLP-1 (7-36) Peptide, Gastrin Releasing Peptide, Ghrelin Peptide, Hexarelin Peptide, Katacalcin Peptide, MBP (85-99) Peptide, MOG (35-55) Peptide, ORG-2766 Peptide, PLP (139- 151) Peptide, Peptide-T, Secretin Peptide, Tesamorelin Peptide, Vasorelaxin Peptide

* AG-490 peptide is beneficial to suppress immunopathological states. It possesses therapeutic potential for T cell-derived pathologies such as graft- versus-host disease, allergy, and autoimmune disorders.

* AM-111 peptide is used for the treatment of acute inner ear (sensorineural) hearing loss. Acute sensorineural hearing loss may be the consequence of various insults to the cochlea. It may result e.g. from overexposure to noise, bacterial or viral infections, inflammation, vascular compromise, or a variety of other factors.

* Astressin-2B peptide is a selective antagonist of CRHR2 which reduces intestinal inflammation and diarrhea. Its use results in considerably less intestinal epithelial damage, congestion, edema and lower levels of immune cell infiltration. It also helps with increased passive stress-coping behavior due to isolation from a female partner.

* Astressin peptide is a nonselective CRF antagonist, particularly potent at inhibiting the hypothalamo-pituitary-adrenal axis. Astressin significantly reverses the anxiogenic-like response induced by both social and intracerebroventricular (ICV) stress. It may have relevance in neuropsychiatric, neurodegenerative disorders and irritable bowel syndrome.

* Atrial natriuretic peptide-ANP is a vasodilator, and a protein (polypeptide) hormone secreted by heart muscle cells. ANP acts to reduce the water, sodium and adipose loads on the circulatory system, thereby reducing blood pressure. ANP has exactly the opposite function of aldosterone –that is, aldosterone stimulates sodium retention and A NP generates sodium loss.

* Beta-Defensins (1 to 4) are cationic peptides with a large spectrum of antimicrobial act ivity that comprise an important arm of the innate immune system. Beta-defensins are e xpressed on some leukocytes and at epithelial surfaces. In addition to their direct antimi crobial activities, they are chemoattractant towards immature dendritic cells and memor y T cells.

* Betahistine is an anti-vertigo drug. It was first registered in Europe in 1970 for the treat ment of Ménière's disease. It is commonly prescribed to patients with balance disorders or to alleviate vertigo symptoms associated with Ménière's disease.

* Bradykinin peptide has multiple physiological effects such as smooth muscle contraction, hypotension induction, natriuresis and diuresis, decrease in blood glucose level, inflammation mediator, and increase of vascular permeability.

* CJC-1295-DAC peptide is a long acting GHRH analog. Growth-hormone-releasing hormone (GHRH), also known as growth-hormone-releasing factor (GRF or GHRF) or somatocrinin. In addition, GHRH also promotes slow-wave sleep. It is also known as deep sleep which is the part of sleep responsible for maximum muscle growth and memory retention level. Also it is beneficial in treating visceral fat deposits in obese AIDS patients and increasing levels of exogenous HGH to increase fat loss.

* Calcitonin peptide causes a rapid but short-lived drop in the level of calcium and phosphate in blood by promoting their assimilation in bones.

* Colivelin is an hybrid peptide synthesized to potentiate the neuroprotective effect of humanin (HN). Colivelin completely suppresses cell death induced by overexpressed Familial Alzheimer's disease (FAD)-causative genes and beta-amyloid (1-43). It also suppresses memory impairment and might serve as a novel drug candidate for treatment of Alzheimer's disease.

* DG-AVP peptide to facilitate memory, reduce or reverse the effects of amnesic drugs, and maintain tolerance to some effects of ethanol.

* FGF-20 recombinant preserves dopamine neuron integrity and some aspects of motor function in Parkinson's disease (PD). FGF-20 has significant radioprotective attributes and is candidate for the treatment of human inflammatory bowel disease.

* Glucagon-like peptide-1 (GLP-1) 7-36 stimulates insulin gene transcription and secretion in pancreatic beta-cells. Displays antiapoptotic effects in hippocampal neurons and reduces food intake. It also reduces the level of sugar (glucose) in the blood.

* Gastrin releasing peptide elicits gastrin release and regulates gastric acid secretion and enteric motor function. GRP is also involved in the biology of the circadian system, playing a role in the signaling of light to the master circadian oscillator in the suprachiasmatic nuclei of the hypothalamus. Furthermore, GRP seems to mediate certain aspects of stress.

* Ghrelin peptide induces the release of growth hormone from the pituitary gland. Beyond regulating hunger, ghrelin also plays a significant role in regulating the distribution and rate of use of energy.

* Hexarelin peptide is an effective and cardioprotective synthetic peptide growth hormone secretagogue that can bring about growth hormone secretion. Effects that may come about with this include higher levels of mitosis, bone mineral density, muscle mass, fat loss, elasticity and connective tissues.

* Katacalcin peptide (procalcitonin) is a potent plasma calcium lowering peptide. Katacalcin belongs to the calcitonin family, that causes a rapid but short-lived drop in the level of calcium and phosphate in blood by promoting the incorporation of these ions in the bones. Calcitonin is cleaved into 2 chains, calcitonin and katacalcin.

* MBP85-99 myelin basic protein (MBP) is a major candidate autoantigen in multiple sclerosis (MS). Its immunodominant epitope, MBP 85-99, forms a complex with human leukocyte antigen (HLA)-DR2 with which multiple sclerosis is genetically associated.

* MOG35-55 myelin oligodendrocyte glycoprotein (MOG) is a glycoprotein believed to be important in the process of myelinization of nerves in the central nervous system (CNS). It is a transmembrane protein expressed on the surface of oligodendrocyte cell and on the outermost surface of myelin sheaths. Interest in MOG has centered on its role in demyelinating diseases, particularly multiple sclerosis (MS).

* Org2766 peptide affects recovery of damaged functions resulting from injury to neural tissue, and recovery of sensorimotor function following peripheral nerve damage - affecting i.e. spatial learning. Aging studies also evidence neurotrophic effects of Org2766 on recovery after injury to the central nervous system.

* PLP139-151 myelin proteolipid protein (PLP). Immunization with this peptide induces severe clinical and histological experimental allergic encephalomyelitis (EAE). PLP139-151 overrides a defect in antigen presentation responsible for resistance to EAE, natural processing and presentation of neuroantigens during the course of acute EAE induces Th2 cells that prevent the relapse of multiple sclerosis (MS).

* Peptide-T is used for cognitive problems, such as memory loss, and trouble with speaking.

* Secretin peptide stimulates the pancreas to emit digestive fluids that are rich in bicarbonate which neutralizes the acidity of the intestines, the stomach to produce pepsin (an enzyme that aids digestion of protein), and the liver to produce bile.

* Tesamorelin peptide increases growth hormone release and improves several measures of cognitive function in cognitively normal and mildly impaired older individuals. It also promotes fat loss in people with lipodystrophy -excess fat most notably around the liver, stomach, and other abdominal organs (visceral body fat).

* Vasorelaxin peptide is an arterial smooth muscle-relaxing eicosapeptide.

1.3.1.11 RT-MB-08

https://archive.org/details/Resonant_Therapy-Molecular_Biology_08

ACTH (1-39) Peptide, ATWLPPR Peptide, Adipotide Polypeptide, BPC-157 Peptide,

CBD3A6K Peptide, CBD3 Peptide, CGRP-ALFA Peptide, CGRP-BETA Peptide, CGRP (8-37) Peptide, D-4F Peptide, HGH (176-191) Peptide, HGH (177-191) Peptide, Humanin HNA Peptide, Humanin HNG17 Peptide, Humanin HNG Peptide, Humanin HN Peptide, IGF-1 LR3 Peptide, ISP Peptide, KC-01 Peptide, Lipopeptide, Olcegepant, PT-141 Bremelanotide Peptide, SNAP-8 Peptide, Substance-P Peptide, TAT-CBD3A6K Peptide, TFF-1 Peptide, TFF-2 Peptide, TFF-3 Peptide, Triptorelin Peptide, Vasonatrin Peptide,

* ACTH (1-39) or adrenocorticotropic hormone peptide is a key component in the hypothalamic-pituitary-adrenal axis, often produced in response to exogenous biological stress along with corticotropin-releasing hormone. Its effects include increased production and release of corticosteroids and, as its name suggests, cortisol from the adrenal cortex. (Top Ten Most Expensive Meds - ACTH)

* ATWLPPR peptide is a potent inhibitor of tumor angiogenesis and metastasis. Prevents blood brain barrier dysregulation and central nervous system vascular permeability under neuroinflammatory conditions.

* Adipotide polypeptide is an experimental weight loss peptidomimetic developed by researchers in an effort to fight obesity. Peptidomimetics are small protein-like chains designed to mimic a peptide. This treatment has reduced by 11% the weight of the treated monkeys by reducing fatty tissue, the BMI, and waist circumference.

* BPC-157 peptide has anti-ulcer peptidergic properties. Protects the endothelium and promotes the process of angiogenesis. Also used for wound healing, including tendons wounds; muscle relaxant, and blood flow regulation throughout the gastro-intestinal tract. Its wound-healing and anti-inflammatory properties can provide aid in the treatment to various inflammatory bowel diseases and quelling the effects of periodontitis around the teeth.

* CBD3A6K peptide suppresses inflammatory and neuropathic behavioral hypersensitivity by inhibiting the ability of collapsin response mediator protein 2 (CRMP-2) to bind to N-type voltage-activated calcium channels (CaV2.2). CBD3A6K is more stable and less prone to the unfolding observed with the parent CBD3 peptide.

* CBD3 peptide interferes with signals that navigate calcium channels to produce pain. Unlike other substances that block pain signals, CBD3 does not directly inhibit the influx of calcium. CBD3 blocks pain in a variety of acute as well as chronic pain models without respiratory distress, cardiac irregularities and other problems caused by addictive opioids.

* Calcitonin gene-related peptide (CGRP) Alfa and Beta exert a broad range of biological effects such as vasodilation, increasing rate and force of cardiac contraction, regulation of calcium and glucose metabolism, reduction of gastrointestinal motility, and

inflammation.

* Calcitonin gene-related peptide CGRP (8-37) is a calcitonin gene-related peptide (CGRP) peptide that works as competitive antagonist, blocking the binding of full length CGRP. It has been shown to inhibit neurogenic vasodilation induced by trigeminal ganglion nerve stimulation.

* D-4F peptide is an apo A-I mimetic peptide synthesized from D-amino acids used for hardening of the arteries that occurs when fat, cholesterol, and other substances build up in the walls of arteries. It also may play a role in reducing inflammatory responses to influenza virus.

* HGH (176-191) peptide exhibits the ability to burn through stubborn adipose tissue, while increasing energy expenditure, muscle mass, and fat oxidation. All studies have pointed to the fact that the fragment is an effective treatment for obesity and fat loss, and much safer than its Human Growth Hormone counterpart.

* HGH (177-191) peptide reduces body fat in obese animals but, enhances fat burning without changing food consumption or inducing growth (as it does not increase IGF levels) or any other unwanted Growth Hormone effect. Recent research has shown this fragment to be an extremely potent and effective fat burner. Actually acts on the reduction of excessive adipose tissues such as those in the abdominal area, increase in muscle mass, and enhances the lipid content of the body.

* Humanin HN peptide and derivatives suppress neuronal cell death induced by the three different types (mutant amyloid precursor protein, presenilin 1, and presenilin 2) of familial Alzheimer’s Disease genes and by A beta. In addition to Alzheimer’s disease, humanin has other neuroprotective effects against models of Huntington’s disease, prion disease, and stroke. Beyond the possible neuroprotective effects, humanin protects against oxidative stress, atherosclerotic plaque formation, and heart attack. Metabolic effects have also been demonstrated and humanin helps improve survival of pancreatic beta-cells, which may help with type 1 diabetes, and increases insulin sensitivity, which may help with type 2 diabetes.

* IGF-1 LR3 polypeptide is a synthetic analog of the naturally existing insulin growth factor (IGF). IGF-1 LR3 builds new muscle tissue by promoting nitrogen retention and protein synthesis. This causes the growth of muscles through both hyperplasia (which is an increase in number of muscle cells) and mitogenesis (which is the actual growth of new muscle fibers).

* ISP or intracellular sigma peptide helps restoring spinal cord function, stopping potentially fatal arrhythmias after heart attack, activation of paralyzed muscles and post-heart attack treatment.

* KC-01 peptide is a potent and selective inhibitor of ABHD16A. useful against disorders that involve brain inflammation such as PHARC (polyneuropathy, hearing loss, ataxia,

retinitis pigmentosa, and cataract), Alzheimer's, multiple sclerosis, Parkinson's, amyotrophic lateral sclerosis (ALS), and secondary injury after stroke and head injuries.

* Lipopeptide boosts new collagen production and Hyaluronic Acid within existing skin. It helps increase ones natural collagen and HA productivity levels and are considered to be one of natures most powerful anti-agers by interacting with cell membranes to boost and revitalize the natural function of the cells, and renewing them to maximum growth potential.

* Olcegepant is a calcitonin gene-related peptide (CGRP) antagonist drug which has anti-migraine effects without apparent cardiovascular effects.

* PT-141 Bremelanotide peptide was shown to be effective in treating sexual dysfunction in both men (erectile dysfunction or impotence) and women (sexual arousal disorder). Unlike Viagra and other related medications, it does not act upon the vascular system, but directly increases sexual desire via the nervous system.

* SNAP-8 peptide is a mimic of the N-terminal end of SNAP-25 which competes with SNAP-25 for a position in the SNARE complex, thereby modulating its formation. If the SNARE complex is slightly destabilized, the vesicle can not release neurotransmitters efficiently and therefore muscle contraction is attenuated, preventing the formation of lines and wrinkles.

* Substance P peptide. In the central nervous system, SP is associated with the regulation of mood disorders, anxiety, stress, reinforcement, neurogenesis, neurotoxicity and pain. In the digestive tract, SP, along with some other tachykinins, are neurotransmitters that regulate motor activity, secretion of ions and fluid, as well as vascular functions.

* TAT-CBD3A6K peptide significantly increases pain tolerance. Like CBD3 or its derivative CBD3A6K works with disruption of collapsin response mediator protein 2 (CRMP2) and N-type voltage-gated calcium channel (CaV2.2) protein-protein interaction as anti-nociceptive for both inflammatory and neuropathic pain. A peptide therapeutic with great efficacy in an AIDS therapy-induced model of peripheral neuropathy. It also suppresses excitability and has no effect on depolarization-evoked calcitonin gene related peptide (CGRP) release.

* TFF peptides (trefoil factor family) are major secretory products of normal mucous epithelia such as gastrointestinal and respiratory tracts, the salivary glands, uterus, conjunctiva, larinx and they are also expressed in minute amounts in the brain. TFF peptides also play a role in wounding responses as well as in pathological processes - chronic inflammatory diseases, metaplasia, and various types of tumors. Their multiple molecular functions include formation of the mucus barrier, enhancement of mucosal repair (restitution) on different levels, modulation of mucosal differentiation processes, and modulation of the immune response.

* Triptorelin (GnRH) peptide raises testosterone levels by causing constant stimulation of the pituitary, it decreases pituitary secretion of gonadotropins luteinizing hormone (LH) and follicle stimulating hormone (FSH). Like other GnRH agonists, triptorelin may be used in the treatment of hormone-responsive cancers such as prostate cancer or breast cancer, precocious puberty, estrogen- dependent conditions (such as endometriosis or uterine fibroids), and in assisted reproduction.

* Vasonatrin peptide is a vasodilator, natriuretic and venodilator peptide that confers cardioprotective effect against ischemia/reperfusion injury, especially in diabetic patients.

1.3.1.12 RT-MB-09

https://archive.org/details/Resonant_Therapy-Molecular_Biology_09

Adalimumab, Aducanumab, Alemtuzumab, Alirocumab, Bavituximab, Benralizumab, Bevacizumab, Blosozumab, Brodalumab, Canakinumab, Certolizumab-Pegol, Cetuximab, Denosumab, Dupilumab, Enokizumab, Evolocumab, Gantenerumab, Gevokizumab, Infliximab, Ipilimumab, Mepolizumab, Omalizumab, Ozoralizumab, Pembrolizumab, Pidilizumab, Rituximab, Romosozumab, Tanezumab, Tositumomab + Iodine 131, Trastuzumab

* Adalimumab is an human monoclonal antibody which binds to tumor necrosis factor-alpha (TNF-alfa). TNF-alfa normally binds to TNF-alfa receptors, which leads to the inflammatory response of autoimmune diseases. By binding to TNF-alfa, adalimumab reduces this inflammatory response. It is used for rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, moderate to severe chronic psoriasis and juvenile idiopathic arthritis.

* Aducanumab is a human monoclonal antibody designed for the treatment of Alzheimer’s disease.

* Alemtuzumab is a drug used in the treatment of chronic lymphocytic leukemia (CLL), cutaneous T-cell lymphoma (CTCL), T-cell lymphoma, and in the treatment of multiple sclerosis. It is also used in some conditioning regimens for bone marrow transplantation, kidney transplantation and islet cell transplantation.

* Alirocumab is an human monoclonal antibody PCSK9 inhibitor designed for the treatment of hypercholesterolemia.

* Bavituximab is a chimeric monoclonal antibody designed for the treatment of cancers and viral infections.

* Benralizumab is a monoclonal antibody which is being developed for the treatment of

asthma. It is directed against the alpha-chain of the interleukin-5 receptor (CD125).

* Bevacizumab is a recombinant humanized monoclonal antibody that blocks angiogenesis by inhibiting vascular endothelial growth factor A (VEGF-A). It is used either alone or in combination therapy in metastatic colorectal cancer, advanced nonsquamous non-small cell lung cancer, metastatic renal cell cancer, glioblastoma multiforme -a type of brain cancer, and eye disease.

* Blosozumab is an humanized monoclonal antibody which binds SOST, a negative regulator of osteoblast activity. Blocking SOST activity can lead to increased bone density.

* Brodalumab is a human monoclonal antibody designed for the treatment of inflammatory diseases.

* Canakinumab is a human monoclonal antibody targeted at interleukin-1 beta. Used for cryopyrin-associated periodic syndromes (CAPS), a spectrum of autoinflammatory syndromes including familial cold autoinflammatory syndrome, Muckle–Wells syndrome, and neonatal-onset multisystem inflammatory disease. Canakinumab was being developed for the treatment of rheumatoid arthritis but this trial was completed in October 2009. Canakinumab is also in phase I clinical trials as a possible treatment for chronic obstructive pulmonary disease, gout and coronary artery disease.

* Certolizumab pegol is a therapeutic monoclonal antibody to tumor necrosis factor alpha (TNF-alpha), for the treatment of Crohn's disease and rheumatoid arthritis.

* Cetuximab is an epidermal growth factor receptor (EGFR) inhibitor used for the treatment of metastatic colorectal cancer, metastatic non-small cell lung cancer and head and neck cancer.

* Denosumab is a fully human monoclonal antibody for the treatment of osteoporosis, treatment-induced bone loss, bone metastases, multiple myeloma, and giant cell tumor of bone.

* Dupilumab is a monoclonal antibody designed for the treatment of atopic, allergic diseases and asthma.

* Enokizumab is an humanized monoclonal antibody designed for the treatment of asthma.

* Evolocumab is a monoclonal antibody designed for the treatment of hyperlipidemia.

* Gantenerumab is a monoclonal antibody for the treatment of Alzheimer's disease.

* Gevokizumab is a potent monoclonal antibody with unique allosteric modulating properties and the potential to treat patients with a wide variety of inflammatory and

other diseases. Gevokizumab binds strongly to interleukin-1 beta (IL-1 beta), a pro-inflammatory cytokine, and modulates the cellular signaling events that produce inflammation. IL-1 beta has been shown to be involved in diverse array of disease states, including non-infectious uveitis (including Behçet's uveitis), cardiovascular disease, and other auto-inflammatory diseases. It's application is under study in moderate to severe inflammatory acne, active non-infectious anterior scleritis, erosive osteoarthritis of the hand, arterial wall inflammation in patients with marked atherosclerotic plaque inflammation, polymyositis/dermatomyositis, giant cell arteritis, and Schnitzler syndrome.

* Infliximab is a chimeric monoclonal antibody against tumour necrosis factor alpha (TNF-alfa) used to treat autoimmune diseases like psoriasis, Crohn's disease, ankylosing spondylitis, psoriatic arthritis, rheumatoid arthritis, and ulcerative colitis.

* Ipilimumab is a drug used for the treatment of non-small cell lung carcinoma (NSCLC), small cell lung cancer (SCLC), bladder cancer, metastatic hormone- refractory prostate cancer, and melanoma, a type of skin cancer. It is a monoclonal antibody that works to activate the immune system by targeting CTLA-4, a protein receptor that down-regulates the immune system.

* Mepolizumab is a humanized monoclonal antibody that recognizes interleukin-5 (IL-5). Mepolizumab has been investigated or is under investigation for the treatment of severe eosinophilic asthma, atopic dermatitis, hypereosinophilic syndrome (HES), eosinophilic esophagitis (EoE), nasal polyposis, eosinophilic granulomatosis with polyangiitis (EGPA) (i.e., Churg Strauss syndrome), and chronic obstructive pulmonary disease (COPD).

* Omalizumab is an humanized antibody originally designed to reduce sensitivity to inhaled or ingested allergens, especially in the control of moderate to severe allergic asthma, which does not respond to high doses of corticosteroids. Also effective in chronic spontaneous urticaria (CSU). Presently, the drug is being actively studied in clinical trials for various allergic diseases and some non-allergic diseases, especially skin diseases. Unlike an ordinary anti-IgE antibody, it does not bind to IgE that is already bound by the high affinity IgE receptor on the surface of mast cells, basophils, and antigen- presenting dendritic cells.

* Ozoralizumab is a humanized monoclonal antibody designed for the treatment of inflammatory diseases.

* Pembrolizumab is a drug that targets the programmed cell death 1 (PD-1) receptor. This monoclonal antibody is intended for use in treating metastatic melanoma.

* Pidilizumab is a monoclonal antibody designed for the treatment of cancer and infectious diseases.

* Rituximab is a chimeric monoclonal antibody against the protein CD20, which is

primarily found on the surface of immune system B cells. Rituximab destroys B cells and is therefore used to treat diseases which are characterized by excessive numbers of B cells, overactive B cells, or dysfunctional B cells. This includes many lymphomas, leukemias, transplant rejection, and autoimmune disorders.

* Romosozumab is a humanized monoclonal antibody that targets sclerostin for the treatment of osteoporosis.

* Tanezumab is an humanized monoclonal antibody against nerve growth factor. It was developed as a treatment for pain. It is undergoing trials for the treatment of various pain entities, including chronic low back pain, bone cancer pain, and interstitial cystitis.

* Tositumomab + Iodine 131 was a drug approved for the treatment of relapsed or chemotherapy/rituxan-refractory Non-Hodgkin lymphoma. The recording plays 8m Tositumomab and 8m of Tositumomab right channel and Iodine 131 left channel.

* Trastuzumab is a monoclonal antibody that interferes with the HER2/neu receptor. Its main use is to treat certain breast cancers. It is also being studied for the treatment of other cancers. It has been used with some success in women with uterine papillary serous carcinomas that over-express HER2/neu.

1.3.1.13 RT-MB-10

https://archive.org/details/Resonant_Therapy-Molecular_Biology_10

Alfa-1-Microglobulin Recombinant, CCK-33 Peptide, CCK-4 Peptide, CCKPeptide, DADLE Peptide, Daclatasvir, Dynorphin-A Peptide, EB-Peptide, Enfuvirtide, Ledipasvir, Maraviroc, Met-12 Peptide, Mitoquinone, NPY Peptide, Oxyntomodulin Peptide, PACAP-Related Peptide, PACAP (6-38) Peptide, PYY Peptide, PF-232798, Peginterferon Alfa-2a, Pep-E Peptide, Pitrakinra Recombinant, Ribavirin, Scytovirin Recombinant, Simeprevir, Sofosbuvir, T-22 Protein, Tachyplesin-1 Peptide, Taribavirin, Vemurafenib

* Alpha-1-microglobulin recombinant protein (A1M) helps to prevent development of arteriosclerosis by inhibiting the oxidation of LDL (low-density lipoproteins) that is induced by the combination of myeloperoxidase (MPO) and hydrogen peroxide.

* Cholecystokinin peptide (CCK-33) causes gallbladder contraction, release of pancreatic exocrine (or digestive) enzymes, and affects other gastrointestinal functions. Cholecystokinin may be the mediator of satiety.

* Cholecystokinin tetrapeptide (CCK-4) acts primarily in the brain as an anxiogenic, CCK-4 reliably causes severe anxiety symptoms when administered to humans and is commonly used in scientific research to induce panic attacks for the purpose of testing

new anxiolytic drugs.

* Cholecystokinin preproprotein (CCK) is a peptide hormone of the gastrointestinal system that is responsible for stimulating the digestion of fat and protein. It's synthesised by I-cells in the mucosal epithelium of the small intestine and secreted in the duodenum.

* DADLE peptide is a synthetic opioid peptide with analgesic properties. Although it is often considered a selective delta opioid receptor agonist, it also binds to the mu1 subtype of mu opioid receptors. Treatment with DADLE results in transient depression of mean arterial blood pressure and heart rate. Preconditioning with DADLE provides ischemic tolerance following transient forebrain ischemia while post-conditioning protection exhibits cognitive benefits.

* Daclatasvir is a drug for the treatment of hepatitis C (HCV). Daclatasvir inhibits the HCV nonstructural protein NS5A. Recent research suggests that it targets two steps of the viral replication process, enabling rapid decline of HCV RNA.

* Dynorphin-A modulates pain response. It can significantly inhibit morphine- or beta-endorphin-induced analgesia. Dynorphin inhibits dopamine release that would counter the pleasurable effects of cocaine. It is important in maintaining homeostasis through appetite control and circadian rhythms. In addition to its role in weight control, dynorphin has also been found to regulate body temperature.

* EB (entry blocker) peptide derived from the signal sequence of fibroblast growth factor 4 exhibits broad-spectrum antiviral activity against influenza viruses including the H5N1 subtype in vitro. It also has shown to have activity against several unrelated viruses like highly pathogenic avian influenza, herpes simplex virus type I, and vaccinia, the prototypic orthopoxvirus. Mechanistically, the EB peptide inhibits the attachment to the cellular receptor, preventing infection. Specifically binds to the viral hemagglutinin protein.

* Enfuvirtide is an HIV fusion inhibitor, the first of a novel class of antiretroviral drugs used in combination therapy for the treatment of HIV-1 infection.

* Ledipasvir is a drug for the treatment of hepatitis C. Ledipasvir is an inhibitor of the hepatitis C virus NS5A protein.

* Maraviroc is an antiretroviral drug in the CCR5 receptor antagonist class used in the treatment of HIV infection. It works by blocking receptor CCR5, found on the surface of cells. By blocking or covering up this receptor, maraviroc prevents HIV from entering and infecting the cell.

* Met-12 peptide may serve as a photoreceptor-protective agent in the setting of retinal-RPE (retinal pigment epithelium) separation.
(http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868404/)

* Mitoquinone or MitoQ has the ability to decrease mitochondrial oxidative damage and thereby improve the outcome of some pathologies. It has been assessed in vivo in disorders such as Alzheimer's Disease, Parkinson's Disease, hypertension, type I diabetes, heart attack, sepsis, fatty liver disease, the metabolic syndrome, alcohol induced steato-hepatitis, protection against doxorubicin and cocaine cardio-toxicity, and in organ preservation for transplantation.

* Neuropeptide Y (NPY) stimulates food intake in a variety of vertebrate species. But also various other biological effects have been attributed to NPY, e.g., profound effects on secretion of luteinising hormone as well as on growth hormone and insulin release. These observations suggest the important role of NPY in the pathophysiology of obesity and diabetes. Furthermore, it has been reported that NPY elicits potent vasoconstriction, facilitates learning and memory retention processes, modulates locomotor behaviors, produces hypothermia, inhibits sexual behavior, shifts the circadian rhythms, modulates cardio respiratory parameters, generates anxiolytic effects, and inhibits alcohol consumption and resistance.

* Oxyntomodulin peptide induces weight loss, reduces appetite, and alters the levels of adipose hormones in overweight and obese people.

* PACAP-Related Peptide (PRP) is a PAC1, VPAC1 and VPAC2 receptor antagonist. It is an excitatory neuropeptide. Induces Ca2+mobilization. It plays a role in hypertension and stress responses.

* PACAP 6-38 is a potent and competitive pituitary adenylate cyclase-activating polypeptide receptor, PAC1 antagonist. Inhibits PACAP(1-27)-induced stimulation of adenylate cyclase. It has antitumor activity in vivo.

* PF-232798 is a new entry inhibitor that stops HIV from entering cells. It may have potential anti-HIV activity against strains of HIV resistant to maraviroc.

* PYY peptide 3-36 (PYY) is one of the circulating forms of PYY, known to inhibit food intake. This anorexigenic effect is masked by stress inhibition of appetite, and it is therefore important to be thoroughly acclimatised for PYY3–36 to be effective. Evidence suggests that PYY3–36 acts via the hypothalamic Y2 receptor.

* Pegylated interferon alfa-2a is an antiviral drug; it has a dual mode of action - both antiviral and on the immune system. This drug is for the treatment of chronic hepatitis C (including patients with HIV co-infection, cirrhosis, 'normal' levels of ALT) and for the treatment of chronic hepatitis B. Peginterferon alfa-2a is a long acting interferon. Interferons are proteins released in the body in response to viral infections. Interferons are important for fighting viruses in the body, for regulating reproduction of cells, and for regulating the immune system.

* Pep-E peptide blocks the binding of IgE to the cell-anchored receptor and efficiently

prevents histamine release from mast cells.

* Pitrakinra is a human recombinant protein. It is an interleukin 4 (IL-4) and interleukin 13 (IL-13) antagonist. Asthma results from a dysregulated, hyperresponsive immune response in the airways. Some immune cells in allergic asthmatics respond aggressively to foreign allergens with the release of IL-4 and 13, two key mediators that initiate a cycle of inflammation in the lung.

* Ribavirin is a guanosine (ribonucleic) analog used to stop viral RNA synthesis and viral mRNA capping, thus, it is a nucleoside inhibitor. Ribavirin is used primarily to treat hepatitis C, it has also been used as a treatment for herpes simplex virus. It is active against a variety of RNA and DNA viruses.

* Scytovirin (SVN) recombinant protein has strong anti-HIV activity against T-tropic strains of HIV-1 and weaker activity against M-tropic strains of HIV-1. Inhibits HIV-1 fusion and infection of CD4 LTR beta-gal cells in vitro. Inhibits fusion of HIV infected CEM-SS cells with uninfected CEM-SS cells, and fusion of HIV-1 Env expressing HL2/3 cells with CD4 LTR beta-gal cells. Binds to HIV gp120, HIV gp160 and to a lesser extent HIV gp41.

* Simeprevir is a drug for treating chronic hepatic C (CHC) infection as a part of a triple antiviral treatment regimen consisting of two other drugs: peginterferon-alfa (PEG-IFN) and ribavirin (RBV). It is primarily efficacious in treating Hepatitis C virus (HCV) genotype 1 infected subjects with compensated liver disease, including cirrhosis. There are currently no studies that show Simeprevir’s effectiveness as a single therapy for HCV. Simeprevir is generally used for HCV genotype 1 infected subjects, but off-label medical use has been indicated for type 4 genotype as well.

* Sofosbuvir is a nucleotide analog used in combination with other drugs for the treatment of hepatitis C virus (HCV) infection. Sofosbuvir inhibits the RNA polymerase that the hepatitis C virus uses to replicate its RNA.

* T22 Protein strongly inhibits the human immunodeficiency virus type 1 (HIV-1)-induced cytopathic effect and viral antigen expression.

* Tachyplesin I is an antimicrobial peptide.It has HIV inhibitory effect during the adsorption period of the virus to the cells. Suppresses the development of cytopathic effects (CPE) and inhibits multinucleated giant cell formation. It also has anticancer activity.

* Taribavirin is an antiviral drug not yet approved for pharmaceutical use. It is a prodrug of ribavirin, active against a number of DNA and RNA viruses. Taribavirin has better liver-targeting than ribavirin, and has a shorter life in the body due to less penetration and storage in red blood cells. It is expected eventually to be the drug of choice for viral hepatitis syndromes in which ribavirin is active. These include hepatitis C and perhaps also hepatitis B, yellow fever, and influenza.

* Vemurafenib is a B-Raf enzyme inhibitor for the treatment of late-stage melanoma.

1.3.1.14 RT-MB-11

https://archive.org/details/Resonant_Therapy-Molecular_Biology_11

ACVR2B Peptide, AP-301 Peptide, AVI-7288 Peptide, AVI-7537 Peptide, Bombesin Peptide, Bottlenose-Dolphin SCN4A Factor, Cannabinoid Receptors CNR1-CNR2, Cytoglobin CYGB, Dopamine, Droxidopa, FG-4592 Peptide, Follistatin-344 Peptide, Gonadorelin Peptide, Human SCN4A Factor, Human Prestin Factor, Humpback-Whale Myoglobin Factor, Humpback-Whale Prestin Factor, KDGIVNGVKA Peptide, L-740093 Peptide, L-DOPA, LGD-4033 Peptide, Link Protein Peptide, MOTS-c Peptide, Myoglobin MB, Neuroglobin NGB, Osteogenic Growth Peptide (OGP), P-113 Peptide, P 11-4 Peptide, TB-500 Peptide, Thymosin Alfa-1 Peptide

* ACVR2B. When this particular peptide binds with proteins such as myostatin, it prevents the proteins from interacting with the ActRIIB receptors. The result of this blockage takes away the regulatory process behind muscular development; this removal of the regulatory process allows the muscles to grow more freely. What's more, it has been shown that ACVR2B also inhibits the expression of several other proteins that are typically linked to the regulation and control of muscle growth within animal test subjects.

* AP-301 peptide mimics the lectin-like domain of TNF-alfa. It is used in the treatment of oedematous respiratory failure in patients suffering from lung infection, lung injury and lung transplantation.

* AVI-7288 is an antisense PMOplus (Phosphorodiamidate Morpholino Oligomer) oligomerdesigned to inhibit NP synthesis of the Marburg virus resulting in catastrophic effects on production of viral mRNA, viral genome replication, and viral assembly.

* AVI-7537 is an antisense PMOplus (Phosphorodiamidate Morpholino Oligomer) oligomer that binds directly to the viral VP24 transcript RNA is the optimal single agent for protection against an Ebola Zaire lethal challenge. The VP24 protein is an inhibitor of type I interferon responses. Thus inhibition of VP24 may lead to a more efficient host response to infection. VP24 also forms homodimers and binds to VP35 as well as NP and may play a role in the switch from viral replication to transcription, a function critical to the viral life cycle.

* Bombesin regulates the contraction of smooth muscle cells, induction of the secretion of neuropeptides and hormones. It is one of the most powerful substances showing anorexic effects in the hypothalamus. It induces the release of gastrin and cholecystokinin in the intestines and the pancreas. It also has cytokine activity.

* Bottlenose-dolphin SCN4A (Voltage-gated sodium channel 4 alpha) factors might help dolphins attain high-speed locomotion. It enables precise matching of motor output and sensory tuning, that is, motor systems must be tuned so that the rate of information flow generated by its movement through the world matches or at least does not exceed the information-encoding rate of its sensors. The mp3 features a different frequency in each channel.

* Cannabinoid receptors' CNR1-CNR2 activation is the trigger to regulating a variety of physiological processes including appetite, pain and pleasure sensation, immune system, mood, and memory. The right channel plays the frequency of CNR1 and the left channel plays that of CNR2.

* Cytoglobin CYGB is a ubiquitously expressed hexacoordinate hemoglobin that may facilitate diffusion of oxygen through tissues, scavenge nitric oxide or reactive oxygen species, or serve a protective function during oxidative stress.

* Dopamine. The dopamine system plays a central role in a number of important medical conditions, including Parkinson's disease, attention deficit hyperactivity disorder, schizophrenia, and drug addiction.

* Droxidopa can cross the blood–brain barrier (BBB) where it is converted to norepinephrine and epinephrine from within the brain. Increased levels of norepinephrine and epinephrine in the central nervous system (CNS) may be beneficial to some patients. Indicated for Neurogenic orthostatic hypotension (NOH), as well as NOH associated with multiple system atrophy (MSA), familial amyloid polyneuropathy (FAP), pure autonomic failure (PAF), and Parkinson's disease (PD). Intradialytic hypotension (IDH) or hemodialysis-induced hypotension.

* FG-4592 peptide works through the body’s natural oxygen-sensing and response system to help produce red blood cells. This can be compared to the body’s natural response to conditions at high altitude, where oxygen levels are low, which is to produce more red blood cells. Diabetes, high blood pressure, and other conditions can cause significant damage to the kidneys. If left untreated, those can result in chronic kidney disease and progress to kidney failure. Such deterioration can lead to patients needing a kidney transplant or being placed on dialysis to remove excess fluid and toxins that build up in the body. The progression of CKD also increases the prevalence of anaemia, a condition associated with having fewer of the red blood cells that carry oxygen through the body, and/or lower levels of haemoglobin, the protein that enables red blood cells to carry oxygen. As haemoglobin falls, the lower oxygen- carrying capacity of an anaemic patients’ blood results in various symptoms including fatigue, loss of energy, breathlessness, and angina.

* Follistatin 344 (FST-344) is an effective Myostatin inhibitor. This peptide results in material muscle growth; it works to help encourage muscle repair and it also helps to improve motor function.

* Gonadorelin (GnRH) increases levels of GnRH which leads women to increase libido and sexual activity. In men increase GnRH surge raises testosterone levels, accompanied by all the typical strong anabolic and androgenic effects. After a transient increase, continuous use of gonadorelin results in downregulation of LH and FSH levels followed by a suppression of ovarian and testicular steroid biosynthesis.

* Human SCN4A (Voltage-gated sodium channel 4 alpha) factor provides instructions for making a critical part (the alpha subunit) of sodium channels that are abundant in muscles used for movement (skeletal muscles). For the body to move normally, these muscles must tense (contract) and relax in a coordinated way. One of the changes that helps trigger muscle contractions is the flow of positively charged atoms (ions), including sodium, into muscle cells. Channels made with the SCN4A protein control the flow of sodium ions into these cells.

* Human prestin factor is a protein that is critical to sensitive hearing in mammals. Prestin is the motor protein of the outer hair cells of the inner ear of the mammalian cochlea. It is highly expressed in the lateral plasma membrane of outer hair cells, the region where electromotility occurs. The expression pattern correlates with the appearance of outer hair cell electromotility.

* Humpback-whale myoglobin factor serves as a reserve supply of oxygen and facilitates the movement of oxygen within muscles. More powerful than human myoglobin, may enhance divers' performance.

* Humpback-whale prestin is a type of biological sonar to find their way about by making high-pitched calls and timing the rebounding echoes. It is a transmembrane protein (10-12 transmembrane domains) with the ability to convert a change in membrane potential into a mechanical force. It is a "direct voltage- to-force converter" and plays a crucial role in sound amplification in various organisms and thus play an important part in an organism's ability to sense sound waves (sensory perception of sound), echolocation or ultrasonic hearing.

* KDGIVNGVKA peptide is a potent peptide inhibitor of alfa-Synuclein -a Parkinson's-disease-related protein. The peptide has the potential to slow or even prevent the onset of Parkinson’s disease.

* L-740093 is the most potent and selective CCK-B antagonist yet described with excellent central nervous system penetration. CCK-B antagonism prevents the stress-induced reactivation of cocaine-induced conditioned place preference, and prevents the long-term maintenance and reinstatement of morphine-induced CPP. Blockade of CCK-B potentiates cocaine-induced dopamine overflow. CCK-B may pose a modulatory role in parkinson's disease. Blockade of CCK-B in dopamine- depleted animals induces significant enhancement of locomotor response to L-DOPA.

* L-DOPA is a dopamine precursor. It crosses the protective blood–brain barrier,

whereas dopamine itself cannot. Thus, L-DOPA is used to increase dopamine concentrations in the treatment of Parkinson's disease and dopamine- responsive dystonia.

* LGD-4033 is an investigational selective androgen receptor modulator (SARM) for treatment of conditions such as muscle wasting and osteoporosis.

* Link protein peptide (DHLSDNYTLDHDRAIH) is a candidate molecule that could be used to treat disc degeneration and low back pain. LP peptide increases glycosaminoglycans production, expression of the human disc matrix genes aggrecan and collagen II, and does not induce an increase of osteogenic differentiation. LP peptide can activate production of the matrix proteins aggrecan and collagen II without significant osteoinductive effect.

* MOTS-c peptide is an hormone that fights the weight gain caused by a high-fat Western diet and normalizes the metabolism - effects commonly associated with exercising. It is a key regulator of metabolic homeostasis. MOTS-c primarily targets muscle tissue, where it restores insulin sensitivity, counteracting diet-induced and age-dependent insulin resistance. It is unique among hormones in that it is encoded in the DNA of mitochondria -the "powerhouses" of cells that convert food into energy. Other hormones are encoded in DNA in the nucleus. MOTS-c offers an unexpected therapeutic option toward the prevention of type 2 diabetes and delaying of the aging processes. Finally, it has the potential to make exercise and dieting a thing of the past.

* Myoglobin MB is the primary oxygen-carrying pigment of muscle tissues. High concentrations of myoglobin in muscle cells allow organisms to hold their breath for a longer period of time. Animals engineered to lack myoglobin are viable, but showed a 30% reduction in volume of blood being pumped by the heart during a contraction. They adapted to this deficiency through natural reactions to inadequate oxygen supply (hypoxia) and a widening of blood vessels (vasodilation).

* Neuroglobin NGB is an intracellular hemoprotein expressed in the central and peripheral nervous system, cerebrospinal fluid, retina and endocrine tissues. It increases oxygen availability to brain tissue and provides protection under hypoxic or ischemic conditions, potentially limiting brain damage.

* Osteogenic growth peptide (OGP) is a key factor in the mechanism of the systemic osteogenic response to local bone marrow injury. Recent histologic studies have shown that OGP enhances fracture healing in experimental animals. OGP and/or its derivatives are suggested as a potential therapy for the acceleration of bone regeneration in instances of fracture repair and perhaps other bone injuries.

* P-113 is a peptide containing 12 of the 24 amino acid residues of the parent molecule, histatin 5, retains full antibacterial activity and has a good spectrum of activity in vitro against prominent pathogens such as P. aeruginosa, S. aureus and H. influenzae.

* P 11-4 peptide spontaneously forms a gel which provides a ‘scaffold’ that attracts calcium and regenerates the tooth’s mineral from within in order to provide natural and pain-free repair of damaged teeth.

* TB-500 (Thymosin Beta 4) may promote endothelial (blood vessels) cell differentiation, angiogenesis (growth of new blood cells from pre-existing vessels) in dermal tissues, keratinocyte migration, collagen deposition, decreases inflammation of tissue in joints, increase muscle growth with huge increases in endurance and strength noted, relaxed muscle spasm and improved muscle tone, increase the exchange of substance between cells, encourage tissue repair, stretches connective tissue and helps maintain flexibility, prevents the formations of adhesions and fibrous bands in muscles, tendons and ligaments.

* Thymosin Alfa-1 peptide enhances cell-mediated immunity in experimental animals and research subjects. It is being researched for the treatment of Hepatitis B and C, and it is also approved for inclusion with vaccines to boost the immune response in the treatment of other diseases.

1.3.1.15 RT-MB-12

https://archive.org/details/Resonant_Therapy-Molecular_Biology_12

5A Apolipoprotein A-I Peptide, APOE (130-149) Peptide, AZD5423, Amphotericin-B, Anidulafungin, B4010 Peptide, BIRB-796 Peptide, Caspofungin, DPII-22 Fragment Peptide, Dapoxetine, Deferoxamine, EPO-EPOR Factors, ETC-642 Peptide, Echinocandin-B Peptide, FEG Peptide, GAP-26 Mimetic Peptide, GAP-27 Mimetic Peptide, GJB2 Factor, Helenalin, Honokiol, Hyperforin, Isavuconazole, MANS Peptide, Melatonin Receptors 1A-1B, Oleocanthal, Papulacandin-B Peptide, Plumbagin, Plumericin, Presenilins PSEN1-PSEN2, Voriconazole

* 5A apolipoprotein A-I peptide attenuates the induction of airway inflammation, airway remodeling, and airway hyperreactivity. It also promotes cholesterol efflux, it is being investigated as a possible therapeutic agent for the treatment of atherosclerosis.

* APOE (130–149) or COG-130 peptide attenuates the increased AHR and goblet cell hyperplasia, as well as the increased expression of MUC5AC and CLCA3 genes. Furthermore, also attenuates multiple indices of airway inflammation, such as bronchoalveolar lavage fluid eosinophilia, total serum IgE levels, and mRNA levels of Th2 (IL-4, IL-13) and Th17 (IL-17A) cytokines, as well as chemokines for eosinophils (CCL7, CCL11, and CCL17). It also reduces expression of products of alternatively activated macrophages, such as chitinase 3-like 3, arginase 1, and Fizz1 (resistin-like alfa). It could be a novel treatment for asthma that has a mechanism of action which is distinct from currently available therapies.

* AZD5423 is a novel nonsteroidal glucocorticoid receptor agonist to treat respiratory diseases and in particular chronic obstructive pulmonary disease.

* Amphotericin B is an antifungal drug often used intravenously for systemic fungal infections (e.g. in critically ill, comorbidly infected, or immunocompromised patients), including cryptococcal meningitis. It is the only effective treatment for some infections. Another use is as a drug of last resort in otherwise-untreatable parasitic protozoan infections such as visceral leishmaniasis and primary amoebic meningoencephalitis. It's spectrum of susceptibility on common fungal contaminants and medically significant fungi includes: Candida albicans, Candida krusei, Coccidioides immitis, Cryptococcus neoformans, and Fusarium oxysporum.

* Anidulafungin is a semisynthetic echinocandin used as an antifungal drug. Anidulafungin has proven efficacy against esophageal candidiasis, but its main use will probably be in invasive Candida infection; it may also have application in treating invasive Aspergillus infection. It is a member of the class of antifungal drugs known as the echinocandins; its mechanism of action is by inhibition of (1→3)-beta-D-glucan synthase, an enzyme important to the synthesis of the fungal cell wall. Anidulafungin significantly differs from other antifungals in that it undergoes chemical degradation to inactive forms at body pH and temperature. Because it does not rely on enzymatic degradation or hepatic or renal excretion, the drug is safe to use in patients with any degree of hepatic or renal impairment.

* B4010 peptide is a potent peptide against several yeast strains with altered sterol structure and composition. The peptide likely targets the plasma membrane to cause rapid dissipation of membrane potential and loss of intracellular components.

* BIRB-796 peptide (Doramapimod). The stress-activated p38 mitogen-activated protein kinase (MAPK) plays a critical role in regulating the production of proinflammatory cytokines such as tumor necrosis factor and interleukin-1. Doramapimod is a highly potent inhibitor of p38 MAPK that blocks TNF-alfa release in LPS-stimulated THP-1 cells, doramapimod inhibits JNK2 alfa-2 in vitro, but at the low concentration necessary to inhibit p38 MAPK, it does not affect the phosphorylation of JNK substrates in cells.

* Caspofungin is a lipopeptide antifungal drug. It is a member of a new class of antifungals termed the echinocandins. It works by inhibiting the enzyme (1→3)-beta-D-glucan synthase and thereby disturbing the integrity of the fungal cell wall. Caspofungin is indicated against presumed fungal infections in febrile, neutropenic adult patients and in the treatment of invasive aspergillosis in adult patients whose disease is refractory to, or who are intolerant of, other antifungal agents (i.e., conventional or lipid formulations of amphotericin B and/or itraconazole). Additionally, is indicated for the treatment of candidemia, some specific Candida infections (intra- abdominal abscesses, peritonitis, pleural cavity infections, and esophagitis) and general invasive candidiasis in adult patients.

* DPII-22 fragment peptide is an active part of house dust mite protein allergens for the

treatment of house dust mite allergy in humans.

* Dapoxetine is the first compound developed specially for the treatment of premature ejaculation (PE) in men 18–64 years old. Dapoxetine works by inhibiting the serotonin transporter, increasing serotonin's action at the post synaptic cleft, and as a consequence promoting ejaculatory delay. As a member of selective serotonin reuptake inhibitor (SSRI) family, dapoxetine was initially created as an antidepressant. However, unlike other SSRIs, dapoxetine is absorbed and eliminated rapidly in the body. Its fast acting property makes it suitable for the treatment of PE but not as an antidepressant.

* Deferoxamine is an iron chelator used to treat acute iron poisoning, especially in small children. This agent is also frequently used to treat hemochromatosis, a disease of iron accumulation that can be either genetic or acquired. Acquired hemochromatosis is common in patients with certain types of chronic anemia (e.g. thalassemia and myelodysplastic syndrome) who require many blood transfusions, which can greatly increase the amount of iron in the body.

* EPO and EPOR factors. Erythropoietin or EPO binds to erythropoietin receptors (EPOR), initiating signaling that stimulates growth, inhibits apoptosis, and induces the differentiation of erythroid progenitors to increase red blood cell mass. EPO has additionally been shown to exert tissue-protective effects on multiple tissues, suggesting a pleiotropic mechanism of action. Erythropoiesis-stimulating agents (ESAs) are used clinically for treating cancer-related anemia (CIA). Signaling pathways downstream of EPO/EPOR have been shown to influence numerous cellular functions in both normal and tumor cells, including proliferation, apoptosis, and drug resistance. EPO right channel, EPOR left channel.

* ETC-642 peptide inhibits endothelial expression of adhesion molecules, markers of the earliest stages of atherosclerosis. It may be used in the treatment of aortic valve stenosis, inflammation and cardiovascular disease.

* Echinocandin-B lipopeptide, is a naturally occurring cyclic hexapeptide with a linoleoyl side chain. It belongs to a class of antifungal agents called echinocandins, which inhibits the synthesis of glucan, a major component of the fungal cell wall, via noncompetitive inhibition of a crucial enzyme, beta-(1,3)- D-glucan synthase.

* FEG tripeptide (not the D-isomeric form "feG") is a carboxyl terminal peptide of the prohormone SMR1 identified in the rat submandibular salivary gland. It has activity against diseases characterized by over exuberant inflammatory responses such as systemic inflammatory response syndrome and other acute inflammatory diseases. Arthritis, sepsis, acute pancreatitis, asthma, acute respiratory inflammation, inflammatory bowel disease. Inhibits cardiac, pulmonary, and intestinal anaphylactic activity, and decreases pulmonary and pancreatic inflammation. It belongs to the class of "Immune Selective Anti-Inflammatory Derivatives" (ImSAIDs).

* GAP-26 and GAP-27 connexin mimetic peptides correspond to specific sequences in

the extracellular loops of connexins 37, 40 and 43. These pepties inhibit Cx43 hemichannel opening triggered by voltage and intracellular Ca2+ elevation. They were first used to inhibit gap-junctional coupling in a wide range of mammalian cells and tissues. Currently, they are also being examined as therapeutic agents that accelerate wound healing, in early treatment of spinal cord injury, and cardiac arrhythmia.

* Gap junction beta-2 protein GJB2 (Connexin 26). A mutation causes a syndrome of sensorineural hearing loss and palmoplantar hyperkeratosis. The bilateral hearing loss is moderate to severe in the high frequencies and progresses slowly after onset in early child-hood. The hyperkeratosis of the palms and soles does not develop until mid childhood and is exacerbated by trauma.

* Helenalin is a sesquiterpene lactone with a variety of observed effects including anti-inflammatory and antitumor activities. Helenalin has been shown to selectively inhibit the transcription factor NF-kappaB, which plays a key role in regulating immune response, through a unique mechanism. In vitro, it is also a potent, selective inhibitor of human telomerase —which may partially account for its antitumor effects—has anti-trypanosomal activity, and is toxic to Plasmodium falciparum. Animal and in vitro studies have also suggested that helenalin can reduce the growth of Staphylococcus aureus and reduce the severity of S. aureus infection.

* Honokiol is a pleiotropic compound, meaning it is able to act on the body through a number of pathways. This diversity of interaction makes it a viable therapy for a number of conditions in the central nervous system, cardiovascular system, and gastrointestinal system. It has been shown to have antitumorigenic, anti-inflammatory, and antioxidant effects as well.

* Hyperforin is a phytochemical believed to be the primary active constituent responsible for the antidepressant and anxiolytic properties of the extracts of St. John's wort. Other medicinal properties of hyperforin include anti-inflammatory and antibiotic effects. As an anti-inflammatory agent, hyperforin inhibits the cyclooxygenase, COX-1, and the lipoxygenase, 5-LO. The anti-inflammatory effect of hyperforin is 3 – 18 times that of aspirin.

* Isavuconazole is an investigational broad-spectrum antifungal for the potential treatment of invasive fungal infections. This kind of infections predominantly occurs in immunocompromised patients such as cancer patients undergoing chemotherapy. It is also approved for the treatment of invasive aspergillosis and invasive mucormycosis (also known as zygomycosis)and candidiasis.

* MANS peptide or MARCKS (151-175) can reduce therapeutically mucus secretion in the airways. Hypersecretion of mucin (the glycoprotein component of mucus) occurs in several respiratory diseases, including asthma, chronic bronchitis and cystic fibrosis. Excess mucus and mucin secretion may increase susceptibility to infection, disrupt innate defenses that may depend on mucociliary function, and interfere with airflow conduction and laminar airflow within central lung airways, further enhancing airway

obstruction. Also, the MANS peptide affords protection from neutrophil elastase-related airway inflammation and limits agonist-induced narrowing of airway lumens, two clinical phenotypes commonly associated with abnormal airway function in chronic bronchitis.

* Melatonin Receptors 1A-1B. Melatonin receptor type 1A MTNR1A mediates reproductive and circadian responses. It is expressed in the pars tuberalis of the pituitary gland and the suprachiasmatic nuclei of the hypothalamus. Melatonin receptor type 1B MTNR1B is expressed in human retina and brain. Its action in the retina is believed to affect several light-dependent functions, including phagocytosis and photopigment disc shedding. MTNR1A left channel, MTNR1B right channel.

* Oleocanthal is a phenylethanoid known to prevent heart disease, calcium buildup in arteries, and veins, and is the target of many studies for other cardiovascular disease therapies. It has strong indications as a therapeutic measure against degenerative joint disease due to its anti-inflammatory properties. The effects of many diseases associated with inflammation such as asthma's inflammation of the lungs are reduced with olencanthal.

* Papulacandin-B inhibits the growth of yeasts. It is a polypeptide antibiotic containing a long-chain fatty acid that inhibits the synthesis of glucan in spheroplasts, and glucan synthesis during cell-wall synthesis, and thus causing lysis of cells by osmotic rupture.

* Plumbagin is an organic compound with antimicrobial, antimalarial, anti-inflammatory, anticarcinogenic, cardiotonic, immunosuppressive, antifertility action, neuroprotective, and anti-atherosclerosis effects.

* Plumericin is a potent inhibitor of NF-kappaB pathways with a new chemical scaffold. It could be further explored as a novel anti-inflammatory leaf compound.

* Presenilins PSEN1-PSEN2. Mutations in the PSEN1 factor are the most common cause of inherited, early-onset forms of Alzheimer's disease, frontotemporal dementia, dilated cardiomyopathy, and familial acne inversa. Mutations in the PSEN2 factor are the most common cause of inherited, early-onset forms of Alzheimer's disease, and dilated cardiomyopathy. Whereas partial loss of presenilins (PSEN1 and PSEN2) causes seborrheic keratosis and autoimmune disease in mice. PSEN1 right channel, PSEN2 left channel.

* Voriconazole is a triazole antifungal medication that is generally used to treat serious, invasive fungal infections. These are generally seen in patients who are immunocompromised, and include invasive candidiasis, invasive aspergillosis, and certain emerging fungal infections.

1.3.1.16 RT-MB-13

https://archive.org/details/Resonant_Therapy-Molecular_Biology_13

Aclidinium Bromide, Alpha-1 Antitrypsin Factor, Arbaclofen Placarbil, BMI-1 Factor, Butyrylcholinesterase Enzyme, Conantokin-G Peptide, Conantokin-R Peptide, Conantokin-T Peptide, Dantrolene, Dextromethorphan, Dystrophin Factor, ERR-Gamma Factor, Ephedrine, Epinephrine, Erythromycin, Flupirtine, GSHHRHVHSPFV Peptide, HSP-10 Factor, HSP-27 Factor, Humatrope Polypeptide, Indacaterol, Ipratropium Bromide, Mucolipin-1 Factor, Nitrous Oxide, Olodaterol, PTK-2 Factor, PTRF-MG53 Factors, Phenibut, Propofol, bpV-HOpic

* Aclidinium bromide is a long-acting, inhaled muscarinic antagonist for chronic obstructive pulmonary disease (COPD).

* Alpha 1-antitrypsin factor is also referred to as alpha-1 proteinase inhibitor (A1PI) because it inhibits a wide variety of proteases. It protects tissues from enzymes of inflammatory cells, especially neutrophil elastase. In its absence, neutrophil elastase is free to break down elastin, which contributes to the elasticity of the lungs, resulting in respiratory complications such as emphysema, or COPD (chronic obstructive pulmonary disease) in adults and cirrhosis in adults or children.

* Arbaclofen placarbil an oral selective gamma-amino butyric acid type B (GABA-B) receptor agonist, is a prodrug of R-baclofen. Arbaclofen placarbil possesses more favorable pharmacokinetic profile than baclofen, with less fluctuations in plasma drug levels. Arbaclofen placarbil (AP) inhibits reflux in gastroesophageal reflux disease and spasticity due to multiple sclerosis.

* BMI-1 factor has been previously linked to the body's ability to regenerate tissue cells in areas such as blood or skin. The activity of this gene enhances the regeneration of the dystrophic muscle to a level where strength is visibly improved. For example, the mice were able to run on a treadmill for a longer time period and at a faster pace. Bmi1 enhances skeletal muscle regeneration through MT1-mediated oxidative stress protection in a mouse model of dystrophinopathy.

* Butyrylcholinesterase also known as pseudocholinesterase or plasma cholinesterase is a non-specific cholinesterase enzyme that hydrolyses many different choline esters. In humans, it is found primarily in the liver and is encoded by the BCHE gene. Pseudocholinesterase deficiency results in delayed metabolism of succinylcholine, mivacurium, procaine, heroin, and cocaine. Butyrylcholinesterase is a prophylactic countermeasure against organophosphate nerve agents. It binds nerve agent in the bloodstream before it can exert effects in the nervous system. Because it is a biological scavenger (and universal target), it is currently the only therapeutic agent effective in providing complete stoichiometric protection against the entire spectrum of organophosphate nerve agents.

* Conantokin-G is a NR2B-selective, competitive antagonist of the NMDA receptor. Blocks NMDA-evoked current in mouse cortical neurons; also inhibits NMDA-evoked

responses in oocytes expressing N2RB, but not NR2A, subunits. Exhibits neuroprotective properties in vivo and in vitro.

* Conantokin-R is a potent, non-competitive NMDA receptor antagonist that has been suggested to have NR2 subunit selectivity. Inhibits inward currents evoked by NMDA in central nervous system neurons and exhibits broad anticonvulsant and antiparkinsonian activity in vivo at doses devoid of behavioral toxicity.

* Conantokin-T is a non-competitive NMDA receptor antagonist. Inhibits Ca2+ influx and glutamate-induced toxicity in central nervous system neurons. Exhibits age-dependent physiological effects; induces a sleep-like state in young mice and hyperactivity in older mice.

* Dantrolene sodium is a postsynaptic muscle relaxant that acts by abolishing excitation-contraction coupling in muscle cells. It achieves this by inhibiting the release of Ca2+ ions by the sarcoplasmic reticulum and may also act as an antagonist for ryanodine receptors. It is the primary drug used for the treatment and prevention of malignant hyperthermia, a rare, life-threatening disorder triggered by general anesthesia. It is also used in the management of neuroleptic malignant syndrome, muscle spasticity (e.g. after strokes, in paraplegia, cerebral palsy, or patients with multiple sclerosis), serotonin syndrome, and 2,4-dinitrophenol poisoning.

* Dextromethorphan is an antitussive (cough suppressant) drug of the morphinan class with sedative and disassociative properties. The primary use of dextromethorphan is as a cough suppressant, for the temporary relief of cough caused by minor throat and bronchial irritation (such as commonly accompanies the flu and common cold), as well as those resulting from inhaled particle irritants.

* Dystrophin factor not only helps build muscle cells, it's also a key factor to attracting nNOS to the muscles cells and helping nNOS bind to the cell and help repair it following activity. Absence of dystrophin starts a chain reaction that eventually leads to muscle cell degeneration and death. While dystrophin is vital for muscle development, the protein also needs several "helpers" to maintain the muscle tissue. One of these "helper" molecular compounds is nNOS, which produces nitric oxide that can keep muscle cells healthy after exercise.

* Estrogen-related receptor gamma (ERR-gamma) factor is an orphan receptor that acts as transcription activator in the absence of bound ligand. Binds specifically to an estrogen response element and activates reporter genes controlled by estrogen response elements (By similarity). Induces the expression of PERM1 in the skeletal muscle. Oxidative myofibers in the skeletal muscles express high levels of angiogenic factors, have dense vasculature, and promptly revascularize during ischemia. Estrogen-related receptor-gamma activates genes that govern metabolic and vascular features typical to oxidative myofibers. ERR-gamma is a hypoxia-independent inducer of neoangiogenesis that can promote reparative revascularization therefore, ERR-gamma dependent remodeling of the myofibers may promote neoangiogenesis and restoration

of blood perfusion in skeletal muscle ischemia.

* Ephedrine is a sympathomimetic amine commonly used as a stimulant, concentration aid, decongestant, appetite suppressant, and to treat hypotension associated with anaesthesia. Chemically, it is an alkaloid with a phenethylamine skeleton found in various plants in the genus Ephedra (family Ephedraceae). It works mainly by increasing the activity of norepinephrine (noradrenaline) on adrenergic receptors.

* Epinephrine is a hormone and a neurotransmitter. The word adrenaline is used in common parlance to denote increased activation of the sympathetic system associated with the energy and excitement of the fight-or-flight response. The influence of adrenaline is mainly limited to a metabolic effect and bronchodilation effect on organs devoid of direct sympathetic innervation. Epinephrine/adrenaline is the drug of choice for treating anaphylaxis. Adrenaline is also used as a bronchodilator for asthma. The main physiological stimulus to epinephrine secretion is exercise. There are learned associations between negative feelings and levels of epinephrine. Overall, the greater amount of epinephrine is positively correlated with an arousal state of negative feelings. Epinephrine does have a role in facilitating the encoding of emotionally arousing events, contributing to higher levels of arousal due to fear. Endogenous epinephrine released during learning modulate the formation of long-lasting memories for arousing events. Adrenaline is used as a drug to treat cardiac arrest and other cardiac dysrhythmias resulting in diminished or absent cardiac output.

* Erythromycin is an antibiotic useful for the treatment of a number of bacterial infections. It is in the macrolide class and has an antimicrobial spectrum similar to or slightly wider than that of penicillin, and is often prescribed for people who have an allergy to penicillins. For respiratory tract infections, it has better coverage of atypical organisms, including Mycoplasma and Legionella.

* Flupirtine is an aminopyridine that functions as a centrally acting non-opioid analgesic. It is a non-opioid, non-NSAID, non-steroidal centrally acting analgesic. Works as a selective neuronal potassium channel opener that lso has NMDA receptor antagonist and GABAA receptor modulatory properties. Flupirtine is used as an analgesic for acute and chronic pain, in moderate- to-severe cases. Its muscle relaxant properties make it popular for back pain and other orthopedic uses, but it is also used for migraines, in oncology, postoperative care, gynecology, and in the treatment of ophthalmic indications, particularly retinitis pigmentosa. Flupirtine has been noted for its neuroprotective properties, and it is being investigated for possible use in Creutzfeldt–Jakob disease, Alzheimer's disease, and multiple sclerosis. It has also been proposed as a possible treatment for Batten disease, multiple sclerosis and fibromyalgia.

* GSHHRHVHSPFV peptide inhibits infectious bronchitis virus (IBV) infectivity in HeLa cells and blocks IBV haemagglutination.

* HSP-10 (Heat Shock Protein) factor helps monitor and organise protein interactions in the body, and responds to environmental stresses, such as exercise and infection, by

increasing its production inside cells. Excessive amounts of HSP10 inside mitochondria -'organs' that act as energy generators in cells- can halt the body's aging process by preserving muscle strength. Age-related loss of skeletal muscle mass is not inevitable and this could have considerable implications for the future health care of the elderly. Between the ages of 50 and 70 we lose approximately 25-30% of our muscle. Falls -a major cause of injury and death in people over the age of 65 -are often the direct result of loss of mobility and weakened skeletal muscle.

* HSP-27 factor (Heat Shock Protein). Our peripheral nerves connect our brain and spinal cord to the rest of our body, controlling all volitional muscle movements. However, they are fragile and very easily damaged. Peripheral nerves can regenerate after injury, and if the site of damage is close to the muscle controlled by the damaged nerve, full muscle function is frequently restored. However, if the site of damage is far from the muscle controlled by the damaged nerve, recovery of muscle function is minimal. Hsp27 promotes peripheral nerve regeneration.

* Humatrope is a polypeptide hormone of rDNA origin. It is used to stimulate linear growth in pediatric patients who lack adequate normal human growth hormone.

* Indacaterol is an ultra-long-acting beta-adrenoceptor agonist for the treatment of chronic obstructive pulmonary disease (COPD).

* Ipratropium bromide is a drug that relieves bronchial spasms. It is an anticholinergic drug used for the treatment of chronic obstructive pulmonary disease and acute asthma. It blocks the muscarinic acetylcholine receptors in the smooth muscles of the bronchi in the lungs, opening the bronchi.

* Mucolipin-1 factor. Muscular dystrophies are a group of muscle diseases characterized by skeletal muscle wasting and weakness. Mutations in certain proteins, most commonly the protein dystrophin, cause muscular dystrophy. A potential way to treat muscular dystrophy directly targets muscle repair instead of the underlying genetic defect that usually leads to the disease. When researchers increased the activity of the calcium channel in the muscular dystrophic mice, it improved muscle membrane repair and restored muscle function. The hope is that the same calcium channel will work in people with muscular dystrophy.

* Nitrous oxide is a weak general anaesthetic and a rapid and highly effective analgesic gas. Nitrous oxide can cause analgesia, depersonalisation, derealisation, dizziness, euphoria, and some sound distortion. Research has also found that it increases suggestibility and imagination. Nitrous oxide inactivates the cobalamin form of vitamin B12 by oxidation.

* Olodaterol is a bronchodilator treatment of airflow obstruction in patients with COPD including chronic bronchitis and/or emphysema.

* PTK2 factor is a focal adhesion-associated protein kinase involved in cellular adhesion

(how cells stick to each other and their surroundings) and spreading processes (how cells move around). Aberrant PTK2/FAK1 expression may play a role in cancer cell proliferation, migration and invasion, in tumor formation and metastasis. PTK2/FAK1 overexpression is seen in many types of cancer. In cardiac muscle, ischemia reperfusion (IR) injury is attenuated by mitochondrial function, which may be upregulated by focal adhesion kinase (FAK). IR-induced skeletal muscle rhabdomyolysis is a fiber type-specific phenomenon that appears to be modulated by mitochondria reserves. Stimulation of FAK may exploit these reserves constituting a potential therapeutic approach to reduce tissue loss following acute limb IR in fast-type muscle.

* PTRF polymerase I and transcript release factor (left channel) and MG53 tripartite motif-containing protein 72 factor (right channel). Throughout the lifecycle, injury to the body's cells occurs naturally, as well as through trauma. Cells have the ability to repair and regenerate themselves, but a defect in the repair process can lead to cardiovascular, neurological, muscular or pulmonary diseases. Recent discoveries of key genes that control cell repair have advanced the often painstaking search for ways to enhance the repair process. The protein MG53, previously shown to be the key initiator in the cell membrane repair process, has the potential to be used directly as a therapeutic approach to treating traumatic tissue damage. MG53 slows the development of the disease by repairing damaged muscle membranes and, it could be used in regenerative medicine to treat other human diseases in which traumatic cell injury occurs. However, in order for MG53 to successfully repair damaged tissue, it must work cooperatively with PTRF. During the muscle repair process PTRF acts as a docking protein, potentially binding MG53 with exposed membrane cholesterol at the injury site. When PTRF is absent in cells, the binding process is interrupted and MG53 can not successfully repair damaged tissues.

* Phenibut is a central nervous system (CNS) depressant and derivative of the naturally occurring inhibitory neurotransmitter gamma-aminobutyric acid (GABA). The addition of a phenyl ring allows phenibut to cross the blood–brain barrier. Phenibut is sold as a nutritional supplement. In Russia it is sold as a psychotropic drug. It has been reported by some to possess nootropic actions for its ability to improve neurological functions, but other researchers have not observed these effects. It is generally accepted that phenibut has anxiolytic effects in both animal models and in humans. Phenibut was discovered in the Soviet Union in the 1960s, and has since been used there to treat a wide range of ailments including post-traumatic stress disorder, anxiety, and insomnia. Phenibut is mandated standard equipment in a Russian cosmonaut's medical kit.

* Propofol produces loss of consciousness rapidly. Its duration of action is short with a mean of 3 to 5 minutes. Studies investigating the recovery profile of propofol have reported that patients anaesthetized with propofol wake-up “elated”, “euphoric”, and “talkative”. Clinical studies indicate that 50% of participating subjects reported “liking” on the Visual Analog Scale and showed preference for propofol over placebo. Sub-anesthetic doses of propofol are reported to produce feelings of “being high”, light-headedness, spaced out and sedation. Propofol at anesthetic doses is reported to

cause dream incidence in 20% to 60% of the exposed population. The primary effect of propofol is potentiation of GABA-A receptors. Similar to barbiturates and benzodiazepines, propofol has been shown to produce rewarding and reinforcing effects in animals. Sub-anesthetic and anesthetic doses of propofol have been shown to increase dopamine concentrations in the nucleus accumbens (brain reward system) in rats. Propofol has a fast onset of action and crosses the blood-brain barrier very quickly. Its short duration of action is due to rapid distribution from the central nervous system to other tissues.

* bpV-HOpic is a bisperoxo oxovanadate dipotassium salt coordinated to 5-hydroxypyridine-2-carboxylate. This vanadium compound has been shown to be a potent inhibitor of protein phosphotyrosine phosphatase (PTP) and PTEN, and has been described to act as an insulin mimetic. This compound has been shown to activate the insulin receptor kinase of hepatoma cells, stimulate lipogenesis in adipocytes, and to enhance PI3K/Akt signaling that could prevent ischemia- reperfusion (I/R) injury to the myocardium. PTEN helps to prevent excessive cell growth under normal conditions and peripheral nerves from regenerating. Peripheral nerve damage can lead to pain, tingling, numbness or difficulty coordinating hands, feet, arms or legs. This can happen with diseases like diabetes, an injury due to a crushed or cut nerve, or other conditions known as neuropathy. PTEN inhibition facilitates intrinsic regenerative outgrowth of adult peripheral axons.

1.3.1.17 RT-MB-14

https://archive.org/details/Resonant_Therapy-Molecular_Biology_14

Alfa-Beta Neoendorphins, Alfa-Endorphin, Anandamide, BD-1063, BRPF1 Factor, Beta-Endorphin, CART (55–102) Fragment Peptide, CART (62–102) Fragment Peptide, CART Factor, CRTC1 Factor, DRD4 Factor, Delta-Opioid Receptor, FAAH Factor, FANDC2-DNA2 Factors, Fingolimod, Gamma-Endorphin, Kappa-Opioid Receptor, LYCAT Factor, Laquinimod, Leu-Met Enkephalins, Mu-Opioid Receptor, Naloxone, Naltrexone, Nociceptin, Nociceptin Receptor, PNPLA3 Factor, PQBP1 Factor, Ponesimod, Prepronociceptin, Sigma-1 Receptor

* Alfa (right channel) and Beta (left channel) neoendorphins are endogenous opioid peptides. Alpha and beta neoendorphins are derived from prodynorphin. Neoendorphins might influence sensory functions due to its heterogeneous presence throughout the body. They also regulate the release of anti-diuretic hormone which when released in the blood helps in water re-absorption from kidneys and when released in the brain affects the social behavior. Neoendorphins decrease dorsal root ganglion neuron calcium-dependent action potential duration, their action is antagonized by naloxone.

* Alfa Beta and Gamma endorphins are endogenous opioid peptides. Endorphins belong to a class of biochemicals commonly referred to as neurohormones that act by

modifying the way in which nerve cells respond to transmitters. The modification of neural transmissions by these biochemicals now appears to be responsible for the insensitivity to pain that is experienced by individuals under conditions of great stress or shock. Endorphins are most heavily released in the human body during stressful events or in moments of great pain. The rush of endorphins into the system at such times is often felt as a queasy or nervous feeling in the stomach. However, the amount of endorphins released by individuals varies so that an occurrence that stimulates significant neurohormone secretion in some people will not necessarily do so in others. In addition to stress and pain, endorphin secretion may be triggered by the consumption of certain foods, such as chocolate and chili peppers. Certain kinds of physical activity have been associated with endorphin secretion in recent years as well. Perhaps the most unusual activity believed to be able to stimulate the body's secretion of endorphins is laughter.

* Anandamide is an endogenous cannabinoid neurotransmitter. It is degraded primarily by the fatty acid amide hydrolase (FAAH) enzyme, which converts anandamide into ethanolamine and arachidonic acid. As such, inhibitors of FAAH lead to elevated anandamide levels and are being pursued for therapeutic use to help treat anxiety and depression.

* BD-1063 is a selective sigma receptor antagonist. Consistent with other reported sigma receptor antagonists, BD1063 significantly decreases the convulsivity and lethality of cocaine, blocks the effects of MDMA, and reduces alcohol intake in rodent models of alcoholism.

* BRPF1 factor or Peregrin is an epigenetic regulator to the healthy development of the hippocampal's dentate gyrus. It changes the way specific genes function without altering their DNA sequence in this part of the brain associated with learning, memory and neural stem cells.

* CART (55–102) and CART (62-102) fragment peptides seem to have an important function in the regulation of energy homeostasis, and interact with several central appetite circuits. They are inhibitors of food intake and are closely associated with leptin and neuropeptide Y, two important peptides in food intake regulation. These CART peptides are also involved in fear and startle behavior and may act as mediator or modulator of the actions of psycho- stimulant drugs. These CART fragments do not affect insulin secretion, even though they are expressed in the pancreas.

* CART factor or cocaine and amphetamine regulated transcript is a protein that in humans is encoded by the CARTPT gene. CART appears to have roles in reward, feeding, and stress, and it has the functional properties of an endogenous psychostimulant. CART is a neuropeptide that produces similar behaviour in animals to cocaine and amphetamine, but conversely blocks the effects of cocaine when they are co-administered. CART may be an important therapeutic target in the treatment of stimulant abuse. CART peptides are also involved in fear and startle behavior. CART is thought to play a key role in the opioid mesolimbic dopamine circuit that modulates

natural reward processes. CART protects mitochondrial DNA (mtDNA), cellular proteins and lipids against the oxidative action of hydrogen peroxide, a widely used oxidant. It may have strong therapeutic properties for human diseases in which oxidative stress is strongly involved such as Parkinson's disease.

* CRTC1 factor is a novel discovered cellular mechanism involved in memory consolidation and a gene therapy which reverses the loss of memory in mice models with initial stages of Alzheimer's disease. The set of genes involved in memory consolidation coincided with the genes regulating a protein which also controls genes related to the metabolism of glucose and to cancer. The alteration of this group of genes could cause memory loss in the initial stages of Alzheimer's disease.

* DRD4 factor is a dopamine receptor responsible for neuronal signaling in the mesolimbic system of the brain, an area of the brain that regulates emotion and complex behavior. Its activity is mediated by G proteins which inhibit adenylyl cyclase. Modulates the circadian rhythm of contrast sensitivity by regulating the rhythmic expression of NPAS2 in the retinal ganglion cells (By similarity). This factor is known to shape behavior and personality development in novelty seeking, susceptibility to peer influences, and ideology.

* Delta-opioid receptor DOR is an opioid receptor that has enkephalins as its endogenous ligands. Activation of delta receptors produces some analgesia. Some agonists may also cause seizures at high doses. Of additional interest is the potential for delta agonists to be developed for use as a novel class of antidepressant drugs. Recent work indicates that exogenous ligands that activate the delta receptors mimic the phenomenon known as ischemic preconditioning.

* FAAH factor degrades bioactive fatty acid amides like oleamide, the endogenous cannabinoid, anandamide and myristic amide to their corresponding acids, thereby serving to terminate the signaling functions of these molecules. Due to the ability of FAAH to regulate nociception, it is currently viewed as an attractive drug target for the treatment of pain. A mutation in FAAH has been linked to drug abuse and dependence. Individuals with the mutation have higher levels of anandamide, the so-called "bliss" molecule, because of lower levels of FAAH, which may reduce anxiety and post-traumatic stress disorder.

* FANCD2 (left channel) and DNA2 (right channel) factors play roles in fixing broken or damaged strands of DNA within a cell, called DNA repair. A defective version of the FANCD2 gene can result in the genetic disease Fanconi anemia (FA), which is characterized by failure of the bone marrow (an inability to replenish the body's supply of blood cells) and a predisposition to certain developmental disorders and cancers. Although DNA2 has not been associated with an FA family as yet, genetic studies implicate DNA2 in the FA DNA repair pathway. Tobacco smoke suppresses the expression of FANCD2, which codes for a DNA damage "caretaker" or repair mechanism.

* Fingolimod is an immunomodulating drug, approved for treating multiple sclerosis. It has reduced the rate of relapses in relapsing-remitting multiple sclerosis by approximately one-half over a two-year period. Fingolimod is a sphingosine-1-phosphate receptor modulator, which sequesters lymphocytes in lymph nodes, preventing them from contributing to an autoimmune reaction.

* Kappa-opioid receptor KOR is one of four related receptors that bind opiate-like compounds in the brain and are responsible for mediating the effects of these compounds. These effects include altering the perception of pain, consciousness, motor control, and mood. Similarly to mu-opioid receptor (MOR) agonists, KOR agonists are analgesic. However, KOR agonists also produce side effects such as dysphoria and hallucinations. KOR agonists have dissociative and hallucinogenic effects, as exemplified by salvinorin A. Activation of the KOR appears to antagonize many of the effects of the MOR. KOR agonists are also known for their characteristic diuretic effects, due to their negative regulation of antidiuretic hormone (ADH). KOR agonism is neuroprotective against hypoxia/ischemia; as such, KORs may represent a novel therapeutic target. KOR agonism may have anticonvulsant effects.

* LYCAT factor higher levels directly correlate with better lung function and outcomes, a type of protective role, or could be slowing the progress of pulmonary fibrosis. Boosting LYCAT levels in patients with pulmonary fibrosis may be a viable new therapeutic approach to treating the disease. In previous genetic studies of patients with idiopathic pulmonary fibrosis -where no cause can be identified, the researchers found variations in several genes known to be involved in pulmonary fibrosis, including in the gene coding for a protein called lysocardiolipin acyltransferase, or LYCAT. To investigate the potential role of LYCAT in pulmonary fibrosis, the researchers measured its levels in the blood of idiopathic pulmonary fibrosis patients. Patients with the highest levels of LYCAT had significantly better lung function and higher three-year survival rates than those with lower levels.

* Laquinimod is an experimental immunomodulator being investigated as an oral treatment for multiple sclerosis (MS).

* Leu (left channel) and Met (right channel) enkephalins. Leu-enkephalin is an endogenous opioid peptide neurotransmitter that is found naturally in the brains of many animals, including humans. It is a five amino acid endogenous peptide that acts as an agonist at opioid receptors. Leu enkephalin has multiple effects on the CNS, including the neuroendocrine hypothalamus. Leu-enkephalin also controls gonadal function. Met-enkephalin is involved in phenomena associated with modulated pain perception, regulation of memory and emotional conditions, food and liquid consumption and regulation of immunological system. It also has an impact on the digestive system motility, gastric as well as in pancreatic secretion and metabolism of carbohydrates. Met-enkephalin is sometimes referred to as opioid growth factor (OGF), it has effects of a relatively short duration.

* Mu-opioid receptor MOR is a class of opioid receptors with high affinity for enkephalins

and beta-endorphin but low affinity for dynorphins. The prototypical mu receptor agonist is morphine, the primary psychoactive alkaloid in opium. In fact, mu refers to morphine. Activation of the mu receptor by an agonist such as morphine causes analgesia, sedation, slightly reduced blood pressure, itching, nausea, euphoria, decreased respiration, miosis (constricted pupils) and decreased bowel motility often leading to constipation. Some of these effects, such as analgesia, sedation, euphoria and decreased respiration, tend to lessen with continued use as tolerance develops.

* Naloxone is a medication used to counter the effects of opioid especially in overdose. It will usually reverse the depression of the central nervous system, respiratory system, and hypotension. In a meta-analysis of people with shock, including septic, cardiogenic, hemorrhagic, or spinal shock, those who received naloxone had improved blood flow.

* Naltrexone is an opioid antagonist used primarily in the management of alcohol dependence and opioid dependence. Naltrexone should not be confused with naloxone nor nalorphine, which are used in emergency cases of opioid overdose. The main use of naltrexone is for the treatment of alcohol dependence. Naltrexone helps patients overcome opioid addiction by blocking the drugs' euphoric effects. Naltrexone is sometimes used for rapid detoxification ("rapid detox") regimens for opioid dependence. The principle of rapid detoxification is to induce opioid-receptor blockage while the patient is in a state of impaired consciousness, so as to attenuate the withdrawal symptoms experienced by the patient.

* Nociceptin or Orphanin FQ is a potent endogenous anti-analgesic. Unlike morphine and other opioids that are used to alleviate pain, nociceptin's role in nociception are not straight forward. There is substantial evidence to suggest that nociceptin is involved in opioid-induced hyperalgesia. It appears that nociceptin is an anxiolytic but also seems to perpetuate depression. It has also been implicated in control of the cardiovascular and renal systems and there is evidence to suggest nociceptin may be involved in the immune system and sepsis.

* Nociceptin receptor NOP is involved in the regulation of numerous brain activities, particularly instinctive and emotional behaviors. Nociceptin is thought to be an endogenous antagonist of dopamine transport that may act either directly on dopamine or by inhibiting GABA to affect dopamine levels. Within the central nervous system its action can be either similar or opposite to those of opioids depending on their location. It controls a wide range of biological functions ranging from nociception to food intake, from memory processes to cardiovascular and renal functions, from spontaneous locomotor activity to gastrointestinal motility, from anxiety to the control of neurotransmitter release at peripheral and central sites. NOP agonists are being studied as treatments for heart failure and migraine while nociceptin antagonists may have analgesic and antidepressant qualities.

* PNPLA3 gene. A common mutation in this gene combined with overweight results in elevated ALAT values in children. The ALAT value is an indicator of liver metabolism. In adults, this gene mutation is known to promote the accumulation of fat in the liver. The

new results indicate that a healthy lifestyle is important already in childhood in order to prevent the accumulation of fat in the liver, and it is especially important for those carrying the risk gene.

* PQBP1 factor provides instructions for making a protein called polyglutamine- binding protein 1. Missense mutations, small and gross deletions, as well as small insertions in this gene may cause intellectual disability and dysmorphisms. Knock-down of PQBP1 in a mouse model impairs anxiety-related cognition -the crucial inflection point between moderate and high cognitive load, where resources shift from anxious apprehension to focus on task demands.

* Ponesimod is an experimental drug for the treatment of multiple sclerosis (MS) and psoriasis.

* Prepronociceptin PNOC is the ligand of the nociceptin receptor (NOP). It may act as a transmitter in the brain by modulating nociceptive and locomotor behavior. May be involved in neuronal differentiation and development.

* Sigma-1 receptor SIGMAR1 function is poorly understood though an endogenous ligand, dimethyltryptamine, was found to interact with it. Activation of sigma– receptors by an agonist ligand may induce hallucinogenic effects and also may be responsible for the paradoxical convulsions sometimes seen in opiate overdose. This receptor is involved in learning processes, memory and mood alteration. Sig-1R agonists facilitate the reinforcing effects of ethanol and induce binge-like drinking, while Sig-1R antagonists block excessive drinking in both genetic and environmental models of alcoholism.

1.3.1.18 RT-MB-15

https://archive.org/details/Resonant_Therapy-Molecular_Biology_15

15-PGDH Inhibitor, Avanafil, B2A Peptide, BTBD3 Factor, CADM2 Factor, Cethrin, Cordycepin, Epelsiban, Fluoxetine, GUCA2B Factor, Glucose, Icariin, L-Arginine, LHX2 Factor, LYZ Factor, MOZ Factor, NSI-189, NPTX2 Factor, Nooglutyl, OPN 129-144 Peptide, RADA-16 Peptide, S-18986, SB705498, SDF-1alfa Factor, SF-1670, SLC9A3R1 Factor, SRHHAFCFR Peptide, Uroguanylin, Urokinase, Vinpocetine

* 15-PGDH inhibitor controls the biological activity of 15-PGDH. PGE2 supports proliferation of many types of tissue stem cells. A gene product found in all humans, 15-hydroxyprostaglandin dehydrogenase (15-PGDH), degrades and reduces the amount of PGE2 in the body. Inhibiting 15-PGDH increases PGE2 in tissues. In so doing, it promotes and speeds tissue healing.

* Avanafil is a PDE5 inhibitor for erectile dysfunction. Avanafil acts by inhibiting a

specific phosphodiesterase type 5 enzyme which is found in various body tissues, but primarily in the corpus cavernosum penis, as well as the retina. PDE5 inhibitors inhibit the degradation of cGMP by PDE5, increasing bloodflow to the penis during sexual stimulation. This mode of action means that PDE5 inhibitors are ineffective without sexual stimulation.

* B2A peptide might facilitate cartilage repair by increasing the expression of many genes associated with chondrocyte maturation in progenitor cells, stimulating chondrogenesis in stem cells as evidenced by the induction of multiple genes associated with chondrocyte differentiation, and increasing the production of extracellular matrix by chondrocytes.

* BTBD3 optimizes neuronal shape to receive sensory input more efficiently. Seeking to uncover the molecule that enables high acuity sensing by examining brain regions that receive information from the senses. It was found that areas responsible for touch in mice and vision in ferrets contain this protein.

* CADM2 factor's has activity in the frontal and cingulate cortex in the brain - which are areas involved in thinking speed. Thus, the gene is linked to the communication process between brain cells. This gene is a candidate for autism and personality, but based on the pathway and expression analyses it may also be relevant to a broad range of neuropsychiatric diseases including dementias. Findings suggest that genetic variation in the CADM2 gene is associated with individual differences in information processing speed.

* Cethrin inhibits ROCK, a signaling master switch that, when activated, triggers cell death and increases damage after SCI (Spinal Cord Injury). Tests in animals with SCI have found that Cethrin inhibits cell death and promotes neural regeneration. The Nogo Receptor 1 gene is required to suppress high levels of plasticity in the adolescent brain and create the relatively quiescent levels of plasticity in adulthood. In mice without this gene, juvenile levels of brain plasticity persist throughout adulthood. When researchers blocked the function of this gene in old mice, they reset the old brain to adolescent levels of plasticity.

* Cordycepin has potential to relieve the symptoms of osteoarthritis. Cordycepin can prevent pain occurring after an injury to a joint, and also relieve existing pain. Cordycepin blocks the inflammatory process that cause pain in osteoarthritis, but does so in a completely different way and at a different stage in the process to existing painkillers such as corticosteroids and non-steroidal-anti-inflammatory drugs (NSAIDs) such as ibuprofen.

* Epelsiban is a drug which acts as a potent and selective oxytocin receptor antagonist for the treatment of premature ejaculation in men.

* Fluoxetine, a commonly prescribed anti-depressive drug, induces a juvenile-like state in the mouse prefrontal cortex. Brain development and maturation has been thought to

be a one-way process until now, in which plasticity diminishes with age.

* GUCA2B or guanylate cyclase activator 2B is the endogenous activator of intestinal guanylate cyclase (see below). It is expressed in the stomach and intestine. This protein stimulates an increase in cyclic GMP, a key component of several intracellular signal transduction pathways. It maybe involved in salt and water secretion into the intestinal lumen as well as the renal tubules, and thus regulate electrolyte homeostasis in these tissues. It may be used for treatment of gastrointestinal functional disorders and diseases including colon polyps.

* Glucose is a primary source of energy for the brain, so its availability influences psychological processes. When glucose is low, psychological processes requiring mental effort (e.g., self-control, effortful decision- making) are impaired. Individuals with diabetes or other conditions where hypoglycemia (low blood sugar) may occur often carry small amounts of sugar in various forms. One sugar commonly used is glucose.

* Icariin has been shown to treat impotence and improve sexual function. It is a PDE5 inhibitor that enhances the production of bioactive nitric oxide, as well as mimicking the effects of testosterone. It also shows antioxidant, antidepressant and neuroprotective effects in animal studies, as well as stimulating osteoblast activity in bone tissue which has been linked to a possible therapeutic role in the treatment of osteoporosis.

* L-arginine could take the place of the current plaque-controlling biocide substances including chlorhexidine and other antimicrobials. A common amino acid found naturally in foods, breaks down dental plaque, which means it could potentially help millions of people avoid cavities and gum disease. L-arginine is found in red meat, poultry, fish, and dairy products, and is already used in dental products for tooth sensitivity. It also stopped the formation of dental plaque in lab tests.

* Lhx2 factor regulates the formation of high-resolution neurocircuitry for touch in mice. In rodents, the whiskers on the snout serve as the 'fingers' in terms of sensing the environment. The fundamental molecular mechanisms that govern the formation of this intertwined circuitry in the mouse model would be broadly applicable to other organisms such as humans and to other sensory modalities such as vision and hearing as well. When the Lhx2 gene is knocked out in cortical neurons, even though the nerves bringing signals from the whiskers do make connections with the sensory cortex, the circuitry that brings about resolution and discrimination is profoundly defective.

* LYZ factor is part of the innate immune system. Reduced lysozyme levels have been associated with bronchopulmonary dysplasia in newborns. Children fed infant formula lacking lysozyme in their diet have three times the rate of diarrheal disease. Since lysozyme is a natural form of protection from gram-positive pathogens like Bacillus and Streptococcus, a deficiency due to infant formula feeding can lead to increased incidence of disease. Whereas the skin is a protective barrier due to its dryness and acidity, the conjunctiva (membrane covering the eye) is, instead, protected by secreted enzymes, mainly lysozyme and defensin. However, when these protective barriers fail,

conjunctivitis results.

* MOZ factor could relay external 'messages' to the developing embryo, revealing a mechanism for how the environment could affect development in very early pregnancy. MOZ and the protein BMI1 (see Resonant Therapy Molecular Biology 13) play opposing roles in giving developing embryos the set of instructions needed to ensure that body segments including the spine, nerves and blood vessels develop correctly and in the right place. MOZ and BMI1 are important for initiating and correctly timing Hox gene expression, ensuring the genes are activated at the right time and in the right place. MOZ is responsible for activating the genes, while BMI1 prevents Hox genes being switched on prematurely. These two key proteins act as genetic 'architects', creating the blueprint needed by embryos during the earliest stages of their development.

* NPTX2 factor or neuronal pentraxin-2 may slow cognitive decline and reduce brain atrophy in people with Alzheimer's disease. The protein seems to be involved in forming or reconfiguring connections between neurons, possibly by clearing away old debris or inefficient connections to make way for new connections.

* NSI-189 is a drug that has been shown to increase the hippocampal volume of adult mice by 20%, and has been shown to stimulate neurogenesis of human hippocampal stem cells in vitro and in vivo. The hippocampus is responsible for the consolidation of information from short-term memory to long-term memory, along with spatial navigation, and is also involved in regulation of mood.

* Nooglutyl is a drug that exhibits pronounced vestibular-protective properties and antimotion activity. Electrophysiological experiments on cats show that nooglutyl alters spontaneous activity in 80% of cortical neurons (somatosensory zone I and area 5 of the parietal association cortex) and considerably weakens effects caused by motion sickness: activation of single unit activity of somatosensory zone I and inhibition of neuron responses to somatic stimulation. Nooglutyl is a positive modulator of AMPA-subtype glutamatergic receptors, in a model of hemorrhagic stroke (HS) -posttraumatic hematoma induced by cerebral tissue destruction in the capsule interna region, nooglutyl decreased the HS-induced neurological deficiency, restored the coordination of movements, improved the passive avoidance reaction retrieval, and prevented the loss of experimental animals.

* OPN 129-144 peptide. Phosphorylated osteopontin peptides suppress crystallization by inhibiting the growth of calcium oxalate crystals. Inhibition of calcium oxalate monohydrate (COM) formation and initiation of the dihydrate (COD) phase by osteopontin (OPN) have been proposed to play an important role in preventing kidney stone formation.

* RADA-16 peptide. Self-assembling peptides have shown that they can be used to establish nanofiber barriers that, when applied directly to a wound in the brain, spinal cord, femoral artery, liver, or skin of a mammal, could achieve complete hemostasis in less than 20s. This therapy stops bleeding without the use of pressure, cauterization,

vasoconstriction, coagulation, or cross-linked adhesives. Unlike other hemostatic agents, self-assembling peptides do not have any pyrogenicity and do not undergo systemic coagulation, which can be a safety issue in animals. This reduces the risk of secondary damage and of the problems caused by the chemical and biological contaminants that are typically present in animal-derived biomaterials such as collagen.

* S-18986 is an ampakine drug related to cyclothiazide. It has nootropic and neuroprotective effects, induces both production of BDNF and AMPA-mediated release of noradrenaline and acetylcholine in the hippocampus and frontal cortex of the brain.

* SB705498 is a TRPV1 antagonist for hTRPV1, antagonizes capsaicin, acid, and heat activation of TRPV1. TRPV1 antagonists, widely viewed as new-generation painkillers, may decrease the resistance of older patients to infection and sepsis.

* SDF-1alfa or stromal cell–derived factor 1-alfa is a potent chondrogenic progenitor cell (CPC) chemoattractant, it may improve the quality of cartilage regeneration, increased recruitment of CPCs by hSDF-1alfa may promote the formation of cartilage matrix upon chondrogenic induction.

* SF-1670 is a selective PTEN inhibitor. As PTEN-mTOR pathway is critical for controlling the regenerative capacity of corticospinal neurons, PTEN deletion or its inhibitor enhances the regenerative ability of adult corticospinal neurons. Pretreatment with SF1670 augments the efficacy of granulocyte transfusion in a clinically relevant mouse model. PTEN helps to prevent excessive cell growth under normal conditions and peripheral nerves from regenerating. Peripheral nerve damage can lead to pain, tingling, numbness or difficulty coordinating hands, feet, arms or legs. This can happen with diseases like diabetes, an injury due to a crushed or cut nerve, or other conditions known as neuropathy. PTEN inhibition facilitates intrinsic regenerative outgrowth of adult peripheral axons. SF1670 is also effective when the number of neutrophils in the blood is too low (neutropenia). One common cause of severe neutropenia is chemotherapy, which is extensively used to treat various hematologic malignancies and solid tumors. Neutropenia-associated infection is the most important dose-limiting toxicity of this therapeutic treatment, impacting on the quality of life and clinical outcomes, with the potential to cause death.

* SLC9A3R1 factor defects are the cause of hypophosphatemic nephrolithiasis/osteoporosis type 2 (NPHLOP2). Hypophosphatemia results from idiopathic renal phosphate loss. It contributes to the pathogenesis of hypophosphatemic urolithiasis (formation of urinary calculi) as well to that of hypophosphatemic osteoporosis (bone demineralization).

* SRHHAFCFR or human aggrecan peptide number 67 can be used for the generation of HLA-B27 tetramer complexes. Mice immunized with this peptide do not develop tenosynovitis. Cartilage proteins such as human aggrecan are known to play an important role in the inflammatory process, because they seem to be a major target in spondyloarthropathies and autoimmunity to aggrecan and to other proteoglycans can

lead to the development of arthritis. The human aggrecan sequence SRHHAFCFR seems to evoke CD8+ T cell responses. The pathology of ankylosing spondylitis, reactive arthritis, and other spondyloarthropathies (SpA) is closely associated with the human leukocyte class I Ag HLA-B27. A characteristic finding in SpA is inflammation of cartilage structures of the joint, in particular at the site of ligament/tendon and bone junction.

* Uroguanylin is secreted by enterochromaffin cells in the duodenum and proximal small intestine. Guanylin acts as an agonist of the guanylyl cyclase receptor GC-C and regulates electrolyte and water transport in intestinal and renal epithelia. In the intestine, uroguanylin markedly increases the transepithelial secretion of chloride and bicarbonate anions and elicits natriuresis, kaliuresis, and diuresis in the kidney. It is a candidate for treatment of gastrointestinal functional disorders and diseases including chronic constipation, irritable bowel syndrome and for normalizing bowel movements with less likelyhood of causing severe diarrhea.

* Urokinase is used clinically as a thrombolytic agent in the treatment of severe or massive deep venous thrombosis, pulmonary embolism, myocardial infarction, and occluded intravenous or dialysis cannulas. It is also administered intrapleurally to improve the drainage of complicated pleural effusions and empyemas. It is the most effective drug in myocardial infarction. In contrast to TPA tissue plasminogen activator, it immediately removes the clot.

* Vinpocetine, an anti-stroke drug, is also an effective treatment for middle- ear infections, showing the ability to suppress mucus overproduction, improve bacterial clearance and reduce hearing loss.

1.3.1.19 RT-MB-16

https://archive.org/details/Resonant_Therapy-Molecular_Biology_16

ARTS-1 Factor, Bendavia Peptide, Beta-2 Microglobulin Factor, CAPE, Catalase Enzyme, Cilostazol, D-Ribose, Disitertide Peptide, F2A Peptide, GLP-2 Peptide, GSTM1 Factor, GSTP1 Factor, Glutathione GSH, HLA-Beta-27 Alfa Factor, IL23R Factor, Lactulose, Levonorgestrel, Methylcobalamin-Vitamin B12, N-Acetyl-Cysteine NAC, PMPAEDIVDLAYES Peptide, Pentoxifylline, RyR2 Factor, SB-431542, STAT5 Inhibitor, Saracitinib, Smad3 Inhibitor-SIS3, Sulfasalazine, Teduglutide, Trans-Resveratrol, YCWSQYLCY Peptide

* ARTS-1 factor mutations' have been linked to an increased risk of ankylosing spondylitis but only in HLA-B27 positive patients.

* Bendavia or SS-31 peptide. Mitochondrial disorders are believed to arise either as a result of inherited genetic defects or through damage caused by a variety of common

diseases. In these diseases, dysfunctional mitochondria are believed to be a principal source of oxidative stress, which may lead to inflammation and other harmful effects, such as reduced mitochondrial bioenergetics. Bendavia may benefit dysfunctional mitochondria with the therapeutic potential to modify disease and improve patient outcomes in diseases including: heart failure, kidney disease, cardiovascular and metabolic diseases, neurodegeneration, and some skeletal muscle disorders.

* Beta-2 microglobulin factor' systemic accumulation in aging blood promotes age-related cognitive dysfunction and impairs neurogenesis, in part via MHC I, suggesting that B2M may be targeted therapeutically in old age. B2M is elevated in the blood of aging humans and mice, and it is increased within the hippocampus of aged mice and young heterochronic parabionts. The absence of endogenous B2M expression abrogates age-related cognitive decline and enhances neurogenesis in aged mice. Serum beta-2-M levels are elevated in diseases associated with increased cell turnover. Levels are also elevated in several benign conditions such as chronic inflammation, liver disease, renal dysfunction, some acute viral infections, and a number of malignancies, especially hematologic malignancies associated with the B-lymphocyte lineage.

* CAPE or caffeic acid phenylethyl ester is an active component of propolis from honeybee hives. A study using CAPE showed a positive effect on reducing carcinogenic incidence. It is known to have antimitogenic, anticarcinogenic, anti-inflammatory, and immunomodulatory properties in vitro. Another study also showed that CAPE suppresses acute immune and inflammatory responses and holds promise for therapeutic uses to reduce inflammation. This anti-cancer effect was also seen when mice skin was treated with bee propolis and exposed to TPA, a chemical that induced skin papillomas. CAPE significantly reduced the number of papillomas. It is a potent and specific inhibitor of nuclear transcription factor, NF-kappaB, activation.

* Catalase has one of the highest turnover numbers of all enzymes; one catalase molecule can convert millions of molecules of hydrogen peroxide to water and oxygen each second. Hydrogen peroxide is a harmful byproduct of many normal metabolic processes; to prevent damage to cells and tissues, it must be quickly converted into other, less dangerous substances. To this end, catalase is frequently used by cells to rapidly catalyze the decomposition of hydrogen peroxide into less-reactive gaseous oxygen and water molecules. According to recent scientific studies, low levels of catalase may play a role in the graying process of human hair. Hydrogen peroxide is naturally produced by the body and catalase breaks it down. If catalase levels decline, hydrogen peroxide cannot be broken down as well. This allows the hydrogen peroxide to bleach the hair from the inside out. This finding may someday be incorporated into cosmetic treatments for graying hair.

* Cilostazol is a quinolinone-derivative medication used in the alleviation of the symptom of intermittent claudication in individuals with peripheral vascular disease. It inhibits platelet aggregation and is a direct arterial vasodilator. Its main effects are dilation of the arteries supplying blood to the legs and decreasing platelet coagulation. Cilostazol is also frequently used off-label, at the same dose, for treatment of intracranial

atherosclerosis and secondary stroke prevention.

* D-Ribose is a central component of a variety of important compounds used to build, operate, and utilize the energy output of mitochondria. These include DNA, RNA, ATP (adenosine triphosphate), FADH (flavin adenine dinucleotide), and NADH (Nicotinamide adenine dinucleotide hydrogenase). D-ribose significantly reduces clinical symptoms in patients suffering from fibromyalgia and chronic fatigue syndrome.

* Disitertide or P144 is a peptide for the treatment of systemic sclerosis or scleroderma, a multisystem disorder characterized by the excessive synthesis and deposition of extracellular matrix proteins that result in the fibrosis of skin and visceral organs. This TGF-beta1 inhibitor peptide is also indicated for the prophylactic or therapeutic treatment of skin tumors at early stages. Disitertide inhibits the formation of papillomas and delays their progression to carcinoma in mice. P144 has also been successfully evaluated in pre-clinical animal models of organ fibrosis and macular degeneration.

* F2A peptide is a biomimetic of basic fibroblast growth factor (bFGF), a signaling agent that plays a role in soft tissue regeneration and in increasing tissue vascularity. It binds with high affinity to specific cell surface receptors, thereby activating cellular signaling pathways. That cellular activation by F2A, in a soft tissue wound setting for example, is designed to result in cell proliferation and migration of stem cells into the wound bed. It also stimulates the production of new blood vessels (angiogenesis). The collective activation of cells should accelerate the healing process and lead to a rapid and strengthened tissue healing. Soft tissue includes tendons, ligaments, fascia, skin, fibrous tissues, fat, and synovial membranes (which are connective tissue), and muscles, nerves and blood vessels (which are not connective tissue).

* GLP-2 or glucagon-like peptide-2 is created by specific post-translational proteolytic cleavage of proglucagon in a process that also liberates the related glucagon-like peptide-1 (GLP-1). GLP-2 is produced by the intestinal endocrine L cell and by various neurons in the central nervous system. Intestinal GLP-2 is co-secreted along with GLP-1 upon nutrient ingestion. GLP-2 produces a number of effects in humans and rodents, including intestinal growth, enhancement of intestinal function, reduction in bone breakdown and neuroprotection. GLP-2 may act in an endocrine fashion to link intestinal growth and metabolism with nutrient intake. GLP-2 and related analogs may be treatments for short bowel syndrome, Crohn's disease, osteoporosis and as adjuvant therapy during cancer chemotherapy.

* GSTM1 factor genetic variations can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. GSTM1 is a glutathione S-transferase (GST) which plays a role in the detoxification of metabolites of environmental carcinogens including tobacco smoke. The body produces its own glutathione. However, poor diet, pollution, toxins, medications, stress, trauma, aging, infections and radiation all deplete glutathione. It is also the most critical and integral part of the detoxification system. All the toxins stick onto glutathione, which then carries them into the bile and the stool -and out of the body. And lastly, it also helps in

reaching peak mental and physical function. Research has shown that raised glutathione levels decrease muscle damage, reduce recovery time, increase strength and endurance and shift metabolism from fat production to muscle development.

* GSTP1 factor or glutathione S-transferases (GSTs) are a family of enzymes that play an important role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. Glutathione S-transferase P or GSTP1 regulates cyclophosphamide cardiotoxicity, and prevents cyclophosphamide toxicity by detoxifying acrolein. Thus, humans with low cardiac GSTP levels or polymorphic forms of GSTP with low acrolein- metabolizing capacity may be more sensitive to cyclophosphamide toxicity. GSTP protects against the endothelial dysfunction induced by tobacco smoke exposure and this protection may be related to the detoxification of acrolein or other related cigarette smoke constituents.

* Glutathione GSH is an important antioxidant that prevents damage to important cellular components caused by reactive oxygen species such as free radicals, peroxides, lipid peroxides and heavy metals. It regulates the nitric oxide cycle which is critical for life, but can be problematic if unregulated. It has a vital function in iron metabolism. Finally, is used in metabolic and biochemical reactions such as DNA synthesis and repair, protein synthesis, prostaglandin synthesis, amino acid transport, and enzyme activation. Raising GSH level is clinically proven to be beneficial for a very wide array of health concerns. GSH is at the heart of all immune functions and low GSH levels are seen in many diseases such as AIDS, advanced diabetes, and cancers. Raising and maintaining GSH levels can help minimize the risk of diseases. The spectrum includes AIDS, Alzheimer’s, asthma, burns, all cancers, cataracts, chronic fatigue syndrome, diabetes, autoimmune disorders, diseases of liver, kidneys, lungs, heart, and digestive system, flu, fibromyalgia, glaucoma (open angle only, closed angle not effected), hepatitis, multiple sclerosis, Parkinson’s, physical trauma, skin disorders, seizures, tumours, and more.

* HLA class I histocompatibility antigen, B-27 alpha chain precursor variations affecting this gene are associated with a spectrum of related disorders comprising ankylosing spondylitis, a subset of psoriatic arthritis, reactive arthritis (e.g. Reiter syndrome), arthritis associated with inflammatory bowel disease and undifferentiated spondyloarthropathy. These disorders may occur simultaneously or sequentially in the same patient, probably representing various phenotypic expressions of the same disease. Ankylosing spondylitis is the form of rheumatoid arthritis affecting the spine and is considered the prototype of seronegative spondyloarthropathies. It produces pain and stiffness as a result of inflammation of the sacroiliac, intervertebral, and costovertebral joints.

* IL23R factor plays a role in the immune response to infection. It provides instructions for making a receptor present on the surface of certain immune cells. These receptors are involved in triggering chemical signals inside the cell that promote inflammation and coordinate the immune system’s response to infection. It has been implicated in diseases such as inflammatory bowel disease, psoriasis and ankylosing spondylitis.

* Lactulose is used in the treatment of chronic constipation in patients of all ages as a long-term treatment. Lactulose is used for chronic idiopathic constipation, i.e. chronic constipation occurring without any identifiable cause. Lactulose may be used to counter the constipating effects of opioids, and in the symptomatic treatment of hemorrhoids as a stool softener. Lactulose is useful in treating hyperammonemia (high blood ammonia), which can lead to hepatic encephalopathy. Lactulose is known for its good acceptance, with limited side effects, similar to many other food products.

* Levonorgestrel is a second generation progestin (synthetic progestogen) used as an active ingredient in some hormonal contraceptives, including combined oral contraceptive pills, progestogen only pills, emergency contraceptive pills, intrauterine systems, contraceptive implants, and hormone replacement therapy. In clinical trials, contraceptive efficacy was reduced in women weighing 75 kg [165 pounds] or more, and levonorgestrel was not effective in women who weighed more than 80 kg [176 pounds]. Levonorgestrel is used in emergency contraceptive pills (ECPs), both in a combined Yuzpe regimen which includes estrogen, and as a levonorgestrel-only method. The levonorgestrel-only method uses levonorgestrel within 3 days of unprotected sex, with one study indicating that beginning as late as 120 hours (5 days) after intercourse could be effective.

* Methylcobalamin is equivalent physiologically to vitamin B12, and can be used to prevent or treat pathology arising from a lack of vitamin B12 (vitamin B12 deficiency), such as pernicious anemia. Methylcobalamin is also used in the treatment of peripheral neuropathy, diabetic neuropathy, and as a preliminary treatment for amyotrophic lateral sclerosis.

* N-acetyl-cysteine NAC is used by the body to build antioxidants. NAC replenishes intracellular levels of the natural antioxidant glutathione (GSH), helping to restore cells' ability to fight damage from reactive oxygen species. Much of NAC's beneficial activity derives from its capacity to modulate expression of genes for myriad signaling molecules in the inflammatory response. Gene expression modifications induced by NAC may also help reduce the acute oxidant-provoked inflammatory response following exercise, making vigorous activity safer and even more beneficial. Finally, obesity-associated insulin resistance, which arises from production of inflammatory signaling molecules in fat cells, can be sharply mitigated by NAC through regulation of their genes.

* PMPAEDIVDLAYES peptide from E. dysenterica has the ability to stimulate motility without causing diarrhea. In addition, the laxative peptide has been seen to promote a different and toxicity free activity than other commercial laxatives.

* Pentoxifylline primary use in medicine is in treating the symptoms of intermittent claudication resulting from peripheral artery disease. Other indications for which the literature supports its use in include: multi-infarct dementia, Peyronie's disease, sarcoidosis, peripheral neuropathy, sickle cell disease, alcoholic and non-alcoholic

steatohepatitis, endometriosis, and radiation-induced fibrosis. Pentoxyphylline is also used to prevent renal toxicity in cases of alcoholic hepatitis, and sperm motility after ejaculation.

* RyR2 factor' mutations lead to a constellation of pathologies leading to both acute and chronic heart failure collectively known as "Ryanopathies". These deleterious mutations may cause leaks in calcium channels leading to impaired glucose tolerance, catecholaminergic polymorphic ventricular tachycardia, stress-induced polymorphic ventricular tachycardia, and arrhythmogenic right ventricular dysplasia. RYR2 channels are associated with many cellular functions, including mitochondrial metabolism, gene expression and cell survival, in addition to their role in cardiomyocyte contraction.

* SB-431542 decreases tumor cell proliferation, extracellular matrix production, and migration. Thus, SB-431542 has the potential to target at least two different phenotypes required for tumor development and progression. Through its effects on ALK/Smad signaling, SB-431542 suppresses renewal in embryonic and induced pluripotent stem cells and promotes their differentiation.

* STAT5 inhibitor controls the biological activity of STAT5. STAT5 programs TH-GM immune cells and triggers the immune response to an autoantigen in responding to a signal from interleukin-7, causing neuroinflammation, pathogenesis and damage in the central nervous system. Blocking either STAT5 or IL-7 provides a substantial therapeutic benefit for multiple sclerosis and autoimmune diseases.

* Saracitinib is a potent Src tyrosine kinase family members inhibitor. An experimental cancer drug, Saracitinib reverses symptoms in Alzheimer's mouse model. With this treatment, cells under bombardment by beta smyloid plaques show restored synaptic connections and reduced inflammation, and the animal's memory, which was lost during the course of the disease, comes back.

* Smad3 Inhibitor, SIS3 489.99 is a potent and selective inhibitor of Smad3 function. SIS3 selectively inhibits TGF-beta1/ALK5-induced Smad3 phosphorylation. Also inhibits the TGF-beta1 effect on type I procollagen expression at the transcriptional levels via the Smad3-binding site. It could be used as a therapeutic intervention for scleroderma by turning back scleroderma fibroblasts abnormally overexpressing alfa-SMA via the inhibition of Smad3, and may be beneficial in other fibrotic disorders.

* Sulfasalazine a sulfa drug, is used for the treatment of mild to severe ulcerative colitis, and treatment of rheumatoid arthritis. It has also been used for Crohn's disease and ankylosing spondylitis. Sulfasalazine is a medicine formed from salicylic acid (the active ingredient in aspirin) and an antibiotic, sulfapyridine. Sulfasalazine is also known as a disease modifying antirheumatic drug (DMARD) because it not only decreases the pain and swelling of arthritis, but also may prevent damage to joints. In addition, it may reduce the risk of long term loss of function. Sulfasalazine is used to treat bowel inflammation, diarrhea (stool frequency), rectal bleeding, and abdominal pain in patients with ulcerative colitis, a condition in which the bowel is inflamed. Sulfasalazine has also

been used successfully to treat cases of idiopathic urticaria that do not respond to antihistamines. Sulfasalazine is in a class of medications called anti-inflammatory drugs. It works by reducing inflammation (swelling) inside the body.

* Teduglutide is a glucagon-like peptide-2 (GLP-2) analog that is used for the treatment of short bowel syndrome. It works by promoting mucosal growth and possibly restoring gastric emptying and secretion. It has trophic and anti-inflammatory effects on gastrointestinal mucosa. Up to a certain point, the gut can adapt to partial resections that result in short bowel syndrome. Still, parenteral substitution of water, minerals and vitamins (depending on which part of the gut has been removed) is often necessary. Teduglutide may reduce or shorten the necessity of such infusions by improving the intestinal mucosa and possibly by other mechanisms. Teduglutide differs from natural GLP-2 by a single amino acid: an alanine is replaced with a glycine. This blocks breaking down of the molecule by dipeptidyl peptidase and increases its half-life from seven minutes (GLP-2) to about two hours, while retaining its biological actions. These include maintenance of the intestinal mucosa, increasing intestinal blood flow, reducing gastrointestinal motility and secretion of gastric acid.

* Trans-resveratrol is a potent phenolic antioxidant found in grapes and red wine that also has antiproliferative and anti-inflammatory activity. trans- Resveratrol is also a selective inhibitor of cyclooxygenase-1 (COX-1). It inhibits COX and peroxidase activities of COX-1; with essentially no inhibition of the COX activity of COX-2. Resveratrol also activates sirtuins and, in C. elegans, extends lifespan.

* The cyclic peptide YCWSQYLCY was designed to mimic the most critical tumor necrosis factor alfa recognition loop on TNF receptor I, and it prevents interactions of TNF alfa with its receptor.

1.3.1.20 RT-MB-17

https://archive.org/details/Resonant_Therapy-Molecular_Biology_17

AIPL-1 Factor, Alcaftadine, Celastrol, Clomifene, D-Leucine, DHEA, Fullerene-C60 Molecule, GC Factor, Gemeprost, Insulin Glargine-Lixisenatide, Isobutrin-RPTP Factor, Isobutrin, LE Dipeptide, LHX-1 Factor, Lanosterol, Lansoprazole, Letrozole, Metformin, Mifepristone, Misoprostol, NFIX Factor, NPD-1 Factor, Rintatolimod, Salbutamol, Sodium Oxybate, Stigmasterol, TMC-1 Factor, Trans-Chalcone, UCP-1 Factor, Vancomycin

* AIPL-1 factor is needed for the proper functioning and survival of cone photoreceptors. Aipl-1 has been associated with the most severe form of LCA or Leber congenital amaurosis leading to the degeneration of photoreceptor cells.

* Alcaftadine is used to prevent eye irritation brought on by allergic conjunctivitis. It is a

H1 histamine receptor antagonist. This effect on histamine receptors seems to show lower rates of itching, eosinophil recruitment and redness after exposure to an allergen.

* Celastrol is a triterpenoid antioxidant compound isolated from the Chinese Thunder of God vine (T. wilfordii). In an isolated rat liver assay of lipid peroxidation, celastrol had an equivalent to about 15 times the antioxidant potency of alfa-tocopherol.

* Clomifene is a selective estrogen receptor modulator (SERM) useful in those who are infertile due to anovulation or oligoovulation. Clomifene has become the most widely prescribed drug for ovulation induction to reverse anovulation or oligoovulation. Evidence is lacking for the use of clomifene in those who are infertile without a known reason.

* DHEA or dehydroepiandrosterone, is an important endogenous steroid hormone. It is the most abundant circulating steroid hormone in humans, in whom it is produced in the adrenal glands, the gonads, and the brain, where it functions predominantly as a metabolic intermediate in the biosynthesis of the androgen and estrogen sex steroids. However, DHEA also has a variety of potential biological effects in its own right, binding to an array of nuclear and cell surface receptors, and acting as a neurosteroid. Regular exercise is known to increase DHEA production in the body. Calorie restriction has also been shown to increase DHEA in primates.

* D-leucine affects neurons differently from other known therapies to control epilectic seizures. D-leucine potently terminates seizures even after the onset of seizure activity. Furthermore, D-leucine, but not L-leucine, reduces long-term potentiation but has no effect on basal synaptic transmission in vitro. D-leucine suppresses ongoing seizures at least as effectively as diazepam but without sedative effects.

* Fullerene-C60 is a spherical fullerene molecule with the formula C60. It has a cage-like fused-ring structure (truncated icosahedron) which resembles a soccer ball, made of twenty hexagons and twelve pentagons, with a carbon atom at each vertex of each polygon and a bond along each polygon edge. It has appealing photo, electrochemical and physical properties, which can be exploited in various medical fields. Fullerene is able to fit inside the hydrophobic cavity of HIV proteases, inhibiting the access of substrates to the catalytic site of enzyme. It can be used as radical scavenger and antioxidant. At the same time, if exposed to light, fullerene can produce singlet oxygen in high quantum yields. This action, together with direct electron transfer from excited state of fullerene and DNA bases, can be used to cleave DNA. In addition, fullerenes have been used as a carrier for gene and drug delivery systems.

* GC factor. Cancers and viruses disable the immune system by destroying (deglycosylating) the Gc protein that is the precursor of GcMAF. With little or no Gc protein, there is little or no GcMAF. With little or no GcMAF there is little or no activation of the macrophages. Biochemically, Gc-MAF results from sequential deglycosylation of the vitamin D-binding protein (the Gc protein), which is naturally promoted by lymphocytes (B and T cells). The resulting protein may be a macrophage activating

factor (MAF). MAFs are lymphokines that control the expression of antigens on the surface of macrophages, and one of their functions is to make macrophages become cytotoxic to tumors. Gc-MAF may play a role in various diseases. Gc-MAF results in high levels of TNF-alpha production and other cytokines which in effect cause side effects such as severe fatigue, fevershness, and depression in some patients.

* Gemeprost is an analogue of prostaglandin E1. It is used as a treatment for obstetric bleeding. It is used with mifepristone to terminate pregnancy up to 24 weeks gestation.

* Insulin glargine -right channel, is a long-acting basal insulin analogue, used once daily to help control the blood sugar level of those with diabetes. It consists of microcrystals that slowly release insulin, giving a long duration of action of 18 to 26 hours, it resembles basal insulin secretion of non-diabetic pancreatic beta cells. Lixisenatide -left channel, is a once-daily GLP-1 receptor agonist for diabetes. GLP-1 is is released within minutes of eating a meal. It is known to suppress glucagon secretion from pancreatic alpha cells and stimulate insulin secretion by pancreatic beta cells.

* Isobutrin and RPTPsigma factor. Receptor protein tyrosine phosphatase sigma (left channel), is highly expressed on the surface of fibroblast-like synoviocytes, specialized cells that line the inside of joints providing lubrication and repairing joint injuries. Normally, RPTPsigma sits quietly on the surface of synoviocytes. It is kept inactive through its interaction with specialized carbohydrate-protein assemblies called proteoglycans, which are studding the cells' surface at high density. When freed from the proteoglycans' grip, RPTPsigma snaps into action and weakens the ability of arthritic synoviocytes to aggressively invade the joint's cartilage. See below details for Isobutrin (right channel). Biologics that target synoviocytes in combination with treatments that suppress the immune system, such as methotrexate or anti-TNF, may address all three aspects of rheumatoid arthritis: swollen joints as a result of inflammation, cartilage damage and bone damage.

* Isobutrin significantly reduces the phorbol 12-myristate 13-acetate and calcium ionophore A23187 -induced inflammatory gene expression and production of TNF-alpha, IL-6, and IL-8 in HMC-1 cells by inhibiting the activation of NF-kappaB. In addition, isobutrin was potent in suppressing the NF-kappaB p65 activation by inhibiting IkappaBalpha degradation. In vitro kinase activity assay revealed that isobutrin was a potent inhibitor of IkappaB kinase complex activity. Activation of mast cells in rheumatoid synovial tissue has often been associated with tumor necrosis factor (TNF)-alpha, interleukin (IL)-6, and IL-8 production and disease pathogenesis by adjacent cell types. The novel pharmacological actions of this polyphenolic compound indicate potential therapeutic value for the treatment of inflammatory and other diseases in which activated mast cells play a role.

* LE dipeptide is a candidate cosmeceutical peptide that can protect skin from UVB induced photoinflammation and erythema. Ultraviolet (UV) radiation induced inflammation plays an important role in the aging of human skin. LE inhibits UVB induced PGE2 synthesis but shows no cytotoxicity toward human keratinocytes.

* LHX-1 factor imparts synchrony among SCN neurons and ensures consolidated rhythms of activity and rest that is resistant to photic noise. The robustness and limited plasticity of the master circadian clock in the suprachiasmatic nucleus (SCN) is attributed to strong intercellular communication among its constituent neurons. However, factors that specify this characteristic feature of the SCN are researched. A phase-shifting light pulse causes acute reduction in Lhx1 expression and of its target genes that participate in SCN coupling. Mice lacking Lhx1 in the SCN have intact circadian oscillators, but reduced levels of coupling factors. Consequently, the mice rapidly phase shift under a jet lag paradigm and their behavior rhythms gradually deteriorate under constant condition. Ex vivo recordings of the SCN from these mice showed rapid desynchronization of unit oscillators.

* Lanosterol is a tetracyclic triterpenoid, which is the compound from which all steroids are derived. Elaboration of lanosterol under enzyme catalysis leads to the core structure of steroids. 14-Demethylation of lanosterol by CYP51 eventually yields cholesterol. Recent research suggests that lanosterol is a key molecule in the prevention of lens protein aggregation and points to a novel strategy for cataract prevention and treatment.

* Lansoprazole belongs to a class of drugs known as proton-pump inhibitors that keep the stomach from pumping too much acid, thus preventing heartburn and ulcers. Proton-pump inhibitors are both safe and widely sold around the world. Lansoprazole was also found to be effective against M. tuberculosis but only when the bacterium grows inside cells. The researchers investigated the underlying biology and found that lansoprazole kills the bacterium after the human cells convert it into a sulfur-containing metabolite. This metabolite targets a particular enzyme that is crucial for the bacterium to produce energy, thereby killing it off. In addition, when the scientists tested lansoprazole against a wide range of other bacteria, it proved to be highly selective for M. tuberculosis. Lansoprazole also enhances amyloid beta production.

* Letrozole is an oral non-steroidal aromatase inhibitor for the treatment of hormonally-responsive breast cancer after surgery. Letrozole has been used for ovarian stimulation by fertility doctors since 2001 because it has fewer side-effects than clomiphene and less chance of multiple gestation. The anti-estrogen action of letrozole has been shown to be useful in pretreatment for termination of pregnancy, in combination with misoprostol. It can be used in place of mifepristone, which is expensive and unavailable in many countries. Letrozole is sometimes used as a treatment for gynecomastia, although it is probably most effective at this if caught in an early stage (such as in users of anabolic steroids). Some studies have shown that letrozole can be used to promote spermatogenesis in male patients suffering from nonobstructive azoospermia.

* Metformin is an antidiabetic drug in the biguanide class. It is the first-line drug of choice for the treatment of type 2 diabetes, in particular, in overweight and obese people and those with normal kidney function. Its use in gestational diabetes has been limited by safety concerns. It is also used in the treatment of polycystic ovary syndrome, and has been investigated for other diseases where insulin resistance may be an

important factor. Metformin works by suppressing glucose production by the liver, it also decreases levels of insulin-like growth factor-1 (IGF-1) and circulating insulin, which is important in patients with type 2 diabetes. Limited evidence suggests metformin may prevent the cardiovascular and possibly the cancer complications of diabetes. It helps reduce LDL cholesterol and triglyceride levels and is not associated with weight gain; in some people, it promotes weight loss. Metformin causes few adverse effects when prescribed appropriately (the most common is gastrointestinal upset) and has been associated with a low risk of having a low blood sugar. Lactic acidosis (a buildup of lactate in the blood) can be a serious concern in overdose and when it is prescribed to people with contraindications, but otherwise, no significant risk exists.

* Mifepristone is a synthetic, steroidal antiprogestogen and antiglucocorticoid drug, which antagonizes cortisol action competitively at the receptor level. It is used for medical termination of intrauterine pregnancies of up to either 49 or 63 days gestation. Softening and dilatation of the cervix prior to mechanical cervical dilatation for pregnancy termination. In combination with gemeprost for termination of pregnancies between 13 and 24 weeks gestation. Labor induction in fetal death in utero. Other medical applications of mifepristone studied in clinical trials include regular long-term use as an oral contraceptive, uterine fibroids, endometriosis, major depression with psychotic features, bipolar depression and disorders causing cognitive dysfunction, post-traumatic stress disorder, chronic multisymptom illness, glaucoma, meningiomas, breast cancer, ovarian cancer, and prostate cancer.

* Misoprostol is a medication used to start labor, induce abortions, prevent and treat stomach ulcers, and treat postpartum bleeding due to insufficient contraction of the uterus. For abortions it is used with mifepristone or methotrexate. It is a synthetic prostaglandin E1 (PGE1).

* NFIX factor regulates neuronal stem cell activity (NSC), also has a role in driving NSC differentiation toward oligodendrocytes, a type of glial cell. These cells produce the myelin that surrounds and protects neurons. Evidence supporting this mechanism in mice and its potential in the development of NSC-based therapy for brain injury, demyelinating diseases, and brain tumors.

* NPD-1 factor, or neuroprotectin D-1 is derived from docosahexaenoic acid (DHA), an essential omega 3 fatty acid found in fish oil. NPD1 regulates the type of brain electrical activity bursts that not only reduce the aberrant brain cell signaling leading to severe generalized seizures, but also spontaneous recurrent seizures. NPD1 helps curtail the onset and progression of temporal lobe epilepsy. In vivo, exhibits a potent anti-apoptotic and anti-inflammatory activity in the tissues in which it is localized. DHA, the main NPD1 precursor, is mostly found in tissues such as the retinal synapses, photoreceptors, the lungs and the brain, suggesting that these tissues are more likely to be benefited from the protecting activity.

* Rintatolimod is an immunomodulatory double stranded RNA drug. Rintatolimod has been proposed and tested as a treatment for illnesses including chronic fatigue

syndrome (CFS), acquired immunodeficiency syndrome (AIDS), and as a synergist with existing antivirals for Avian Flu. Rintatolimod protects and stimulates the innate immune system by binding to Toll-like receptors 3 (TRL-3), and activating the TLR-3 receptors for broad-spectrum immune response. TLR-3 receptors are located on cell surfaces. They are part of a family of “pattern recognition” receptors that detect pathogens immediately, even those the body has not yet encountered, long before adaptive immunity can intervene against foreign invaders. These receptors are critical to the first line of immunological defense against a broad range of pathogens, including otherwise lethal viruses and various forms of cancer. When Rintatolimod binds to TRL-3 receptors the virus cannot do so and the body is able to marshal its defenses and launch an assault on the virus. Rintatolimod is designed to boost cellular defenses against viruses and tumors, and can be used for Avian Flu, AIDS, and other depressed immune-system related diseases. Studies using Ampligen are in progress and in preparation. Other suggested uses include Ebola and Smallpox.

* Salbutamol is a short-acting beta2-adrenergic receptor agonist used for the relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease (COPD). Salbutamol is typically used to treat bronchospasm (due to any cause, allergen asthma or exercise-induced), as well as chronic obstructive pulmonary disease. As a beta2-agonist, salbutamol also finds use in obstetrics. Salbutamol can be used as a tocolytic to relax the uterine smooth muscle to delay premature labor. Salbutamol has been used to treat acute hyperkalemia, as it stimulates potassium flow into cells thus lowering the level in the blood. Salbutamol appears to show modest benefits at treatment of spinal muscular atrophy, where it. The drug is speculated to modulate the alternative splicing of the SMN2 gene, increasing the amount of the SMN protein whose deficiency is regarded as the root cause of the disease. Other potential uses include in cystic fibrosis, and subtypes of congenital myasthenic syndrome associated with mutations in Dok-7. Salbutamol has been shown to improve muscle weight in rats and anecdotal reports hypothesis that it might be an alternative to clenbuterol for purposes of fat burning and muscle gain, with multiple studies supporting this claim.

* Sodium oxybate is a medication for the treatment of excessive daytime sleepiness (EDS) associated with narcolepsy, and cataplexy associated with narcolepsy. Sodium oxybate is the sodium salt of gamma-hydroxybutyric acid (GHB) used for treatment of alcohol withdrawal and dependence.

* Stigmasterol is used as a precursor in the manufacture of semisynthetic progesterone, a valuable human hormone that plays an important physiological role in the regulatory and tissue rebuilding mechanisms related to estrogen effects, as well as acting as an intermediate in the biosynthesis of androgens, estrogens, and corticoids. It is also used as the precursor of vitamin D3. Research has indicated that stigmasterol may be useful in prevention of certain cancers, including ovarian, prostate, breast, and colon cancers. Studies have also indicated that a diet high in phytoesterols may inhibit the absorption of cholesterol and lower serum cholesterol levels by competing for intestinal absorption. Studies with laboratory animals fed stigmasterol found that both cholesterol and sitosterol absorption decreased 23% and 30%, respectively, over a 6-week period. It

also possesses potent antioxidant, hypoglycemic and thyroid inhibiting properties. Being a steroid, stigmasterol is precursor of anabolic steroid boldenone.

* TMC-1 factor is a common cause of human genetic deafness, accounting for 4 to 8 percent of cases, the disease is caused by mutations affecting the gene. It is a probable ion channel required for the normal function of cochlear hair cells.

* Trans-Chalcone blocks the action of a key enzyme that allows the bacteria to thrive in oral cavities. The bacteria Streptococcus mutans metabolise sugars from food and drink, which produces a mild acid and leads to the formation of plaque. Without good dental hygiene, the combination of plaque and mouth acid can lead to tooth decay. Blocking the activity of the enzyme prevents bacteria forming a protective biological layer -known as a biofilm around themselves. Plaque is formed when bacteria attach themselves to teeth and construct biofilms. Preventing the assembly of these protective layers would help stop bacteria forming plaque.

* UCP1, or uncoupling protein 1, in burn patients, has been observed to produce a gradual shift in molecular and functional characteristics of white fat to a more brown fat phenotype over time, suggesting progressive browning of white fat in response to a burn injury. Brown fat cells are unique from white fat in terms of their genes, structure and function. Brown fat cells are smaller than white fat cells, have higher numbers of mitochondria -the combustion engines of the cell and express UCP1. Adrenaline turns on UCP1, which makes mitochondria burn calories without making any chemical energy -just heat.

* Vancomycin, member of the glycopeptide antibiotic class, is primarily used to treat serious infections caused by gram-positive bacteria which are known or suspected to be resistant to other antibiotics. Vancomycin is the first-line treatment for complicated skin infections, bloodstream infections, endocarditis, bone and joint infections, and meningitis caused by methicillin- resistant S. aureus. Vancomycin is recommended as a treatment for intestinal infection with Clostridium difficile, a common side effect of treatment with broad-spectrum antibiotics.

1.3.1.21 RT-MB-18

https://archive.org/details/Resonant_Therapy-Molecular_Biology_18

AN-2728, AN2728-RPTPsigma Factor, ATM Factor, Betamethasone-Dexchlorpheniramine, CNTROB Factor, CRF Factor, CZEN-002 Peptide, Cabozantinib, Celebrex Plus Gabapentin, Chlorophyll, DIM, Danegaptide, Ghrelin210 Peptide, Guanabenz, KG-5, MCB-613, Moroidin, OP-145 Peptide, Omiganan Peptide, PAC-113 Peptide, PLEKHA7 Factor, RB-1 Factor, Royalactin, TLR-3 Factor, TP-508 Peptide, Ticagrelor, Tranexamic Acid, Tylotoin Peptide, Varenicline, hLF 1-11 Peptide

* AN-2728 is a boron-containing drug for psoriasis and atopic dermatitis (atopic eczema). It is a phosphodiesterase-4 inhibitor, mainly acting on phosphodiesterase 4B (PDE4B). Inhibition of PDE4B appears to suppress the release of tumor necrosis factor alpha (TNFalfa), interleukin-12 (IL-12), IL-23 and other cytokines, proteins believed to be involved in the immune response and inflammation. May be of use for the treatment of atopic dermatitis, psoriasis, anxiety, enhancing cognitive function, preventing and/or helping people overcome PTSD, and possibly offsetting likelihood of neurodegenerative diseases.

* AN2728 plus RPTPsigma factor or receptor protein tyrosine phosphatase sigma (right channel), is highly expressed on the surface of fibroblast-like synoviocytes, specialized cells that line the inside of joints providing lubrication and repairing joint injuries. Normally, RPTPsigma sits quietly on the surface of synoviocytes. It is kept inactive through its interaction with specialized carbohydrate-protein assemblies called proteoglycans, which are studding the cells' surface at high density. When freed from the proteoglycans' grip, RPTPsigma snaps into action and weakens the ability of arthritic synoviocytes to aggressively invade the joint's cartilage. See above details for AN2728 (left channel). Biologics that target synoviocytes in combination with treatments that suppress the immune system, such as methotrexate or anti-TNF, may address all three aspects of rheumatoid arthritis: swollen joints as a result of inflammation, cartilage damage and bone damage.

* Ataxia telangiectasia mutated (ATM) is a serine/threonine protein kinase that is recruited and activated by DNA double-strand breaks. It phosphorylates several key proteins that initiate activation of the DNA damage checkpoint, leading to cell cycle arrest, DNA repair or apoptosis. The protein is named for the disorder Ataxia telangiectasia caused by mutations of ATM. The wild-type ATM gene is expressed at a 4-fold increased level in human testes compared to somatic cells (such as skin fibroblasts). In both mice and humans, ATM deficiency results in female and male infertility. Deficient ATM expression causes severe meiotic disruption during prophase I. In addition, impaired ATM-mediated DNA double-strand break (DSB) repair has been identified as a likely cause of aging of mouse and human oocytes. Expression of the ATM gene, as well as other key DSB repair genes, declines with age in mouse and human oocytes and this decline is paralleled by an increase of DSBs in primordial follicles. These findings indicate that ATM-mediated homologous recombinational repair is a crucial function of meiosis.

* Betamethasone-dexchlorpheniramine is a drug containing betamethasone and dexchlorpheniramine maleate to treat allergic conditions. Betamethasone is a steroid to relief itches and inflammation while dexchlorpheniramine maleate is an antihistamine to treat urticaria.

* Centrobin is a protein that in humans is encoded by the CNTROB gene. It is a centriole-associated protein that asymmetrically localizes to the daughter centriole, and is required for centriole duplication and cytokinesis. Removal of the daughter-centriole specific protein Centrobin (CNB) allows daughter centrioles to serve as basal bodies.

Thus CNB-depleted neurons present two cilia, the standard, which is templated by the mother centriole and a second one templated by the daughter centriole from which CNB has been removed. Conversely, mother centrioles engineered to carry CNB cannot function as basal bodies and, therefore, neurons modified this way cannot assemble cilia. In humans, the lack of cilia, or cilia that do not work well, are the cause of a long list of disorders, known as ciliopathies, which include polydactyly, obesity, respiratory dysfunction, hearing impairment, and many others.

* CRF or Corticotropin-releasing factor is a potent and efficacious agent in protecting skin against experimental thermal injury. Inhibits the edema and protein extravasation produced by heat applied.

* CZEN-002 a dimeric octamer derived peptide from alfa-melanocyte-stimulating hormone used as anti-inflammatory and vulvovaginal candidiasis.

* Cabozantinib is a small molecule inhibitor of the tyrosine kinases c-Met and VEGFR2, and has been shown to reduce tumor growth, metastasis, and angiogenesis.

* Celebrex (right) plus Gabapentin (left). Celebrex is a COX-2 selective nonsteroidal anti-inflammatory drug (NSAID). It is used to treat the signs and symptoms of osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, acute pain in adults, painful menstruation, and juvenile rheumatoid arthritis in patients two years or older. Gabapentin is a medication used as an anticonvulsant and analgesic. Originally it was developed to treat epilepsy, and is currently used to relieve neuropathic pain and restless leg syndrome. It is recommended as a first line agent for the treatment of neuropathic pain arising from diabetic neuropathy, post-herpetic neuralgia, and central neuropathic pain.

* Chlorophyll helps control hunger and cravings, controls body odor, encourages healing, promotes cleansing, protects DNA against fried foods, has a potent antioxidant action, a promising potential for cancer therapy, it is effective against candida albicans, relieves systemic redness and swelling, and promotes healthy iron levels. The recording presents chlorophylls A, B, C1 and C2.

* DIM (3,3'-diindolylmethane) is a compound that previously has been found to have cancer preventive properties. DIM has been studied as a cancer prevention agent for years, now there is indication that DIM can also act as a radiation protector.

* Danegaptide, a small modified dipeptide, has been identified as a potent and selective second generation gap junction modifier. Gap junction uncoupling can alter conduction pathways and promote cardiac re-entry mechanisms that potentiate many supraventricular arrhythmias, such as atrial fibrillation (AF) and atrial flutter (AFL). Gap junction modifier GAP-134, showed consistent efficacy on measures of conduction and AF/AFL inducibility in the canine sterile pericarditis model. GAP-134 is a pharmalogical agent with a favorable clinical safety profile and potential antiarrhythmic efficacy.

* Ghrelin210 is an endogenous host-defence peptide to treat airway inflammation, chronic respiratory infection and cystic fibrosis.

* Guanabenz acts by temporarily blocking the reactivation of a protein known as eukaryotic translation initiation factor 2 (eIF2alfa). When deactivated, eIF2alfa initiates the stress response pathway. Blocking its reactivation results in a prolonged stress response and provides protection against cell death. The researchers hypothesize that guanabenz stimulates a protective cascade – because fewer oligodendrocytes die, less immune cells are recruited to the brain, which results in a decreased inflammatory response and preservation of myelin levels. Gunabenz is an alfa agonist of the alfa-2 adrenergic receptor that is used as an antihypertensive drug. It is used to treat high blood pressure (hypertension). Guanabenz also prevents myelin loss and alleviates clinical symptoms of multiple sclerosis (MS) in animal models. The drug appears to enhance an innate cellular mechanism that protects myelin- producing cells against inflammatory stress, and points to new avenues for the development of new, protective therapies against MS.

* KG5 increases the DNA-damaging effects of radiation and certain chemotherapies. KG5 targets the RAF pathway which is used by tumor cells to protect DNA from damage. It may improve the outcomes of those patients suffering from aggressive cancers that can become resistant to chemotherapy and radiation treatments.

* MCB-613 is an activator of the steroid receptor coactivators (SRC-1, SRC-2, and SRC-3). MCB-613 kills human breast, prostate, lung, and liver cancer cells, while sparing normal cells. MCB-613 reduces tumor growth without causing toxicity. The toxic effect of the drug is due to the accumulation of unfolded proteins in the ER. The inability of the ER to cope with such a large number of proteins causes a state of stress to develop that stimulates production of toxic ROS species and the destruction of the cell. MCB-613 is a candidate drug that destroys cancer cells by stimulating them to produce more proteins than the cells can actually process was shown to kill a wide variety of cancer cells in culture and to inhibit tumor growth in animal models, it works in multiple types of cancers.

* Moroidin is a mitotic inhibitor; it interrupts the polymerization of tubulin during the formation of the mitotic spindle. If no spindle forms, then there is no alignment or segregation of chromatids during mitosis, so no cell division. More mitoses, more cell divisions. More divisions, more cells. Too many more cells = cancer.

* OP-145 is a synthetic 24-mer peptide derived from LL-37 for binding to lipopolysaccharides or lipoteichoic acid used in chronic bacterial middle ear infection.

* Omiganan is an anti-inflammatory peptide used for severe acne and rosacea.

* PAC-113 is a synthetic 12-mer peptide derived from histatin 3 and histatin 5 for oral candidiasis.

* PLEKHA7 factor recruits the so-called "microprocessor complex" (association of DROSHA and DGCR8 proteins) to a growth-inhibiting site (apical zonula adherens) in epithelial cells instead of sites at basolateral areas of cell–cell contact containing tyrosine-phosphorylated p120 and active Src. Recruitment to the latter sites disrupts miRNAs regulation, causing tumorigenic growth. Restoring normal miRNA levels in tumor cells can reverse that aberrant cell growth. Loss of the apical PLEKHA7-microprocessor complex is an early and somewhat universal event in cancer. In most human tumor samples this apical structure is absent, although E-cadherin and p120 are still present. This produces the equivalent of a speeding car that has a lot of gas (the bad p120) and no brakes (the PLEKHA7-microprocessor complex).

* RB-1 factor can allow for the regrowth of cells in the inner ear and potentially restore hearing and balance caused by the loss of sensory hair cells. Noise is one of the most common causes of hearing loss. Balance is heavily affected by the loss of these cells. Some individuals who have lost a significant amount of sensory hair cells in the vestibular organs, the part of the inner ear controlling balance and equilibrium, are unable to walk on their own two feet any longer. After a two-week period of lessening the expression of the RB1 gene in transgenic mice, inner-ear cells have regrown without adverse side effects previously observed in other retinoblastoma mouse models. The protein encoded by this gene is a negative regulator of the cell cycle and was the first tumor suppressor gene found. The encoded protein also stabilizes constitutive heterochromatin to maintain the overall chromatin structure. Defects in this gene are a cause of childhood cancer retinoblastoma (RB), bladder cancer, and osteogenic sarcoma.

* Royalactin or MRJP1 factor is the active ingredient in royal jelly. Major royal jelly protein 1 induces the differentiation of honeybee larvae into queens.

* TLR3 factor which in other contexts plays a fundamental role in recognizing some disease-causing organisms and activating the immune system, during wounding also activates the genes IL6 and STAT3 to promote hair follicle regeneration. TLR3 also activates other molecules involved in hair development, including the Wnt and Shh signaling pathways and a gene called EDAR, which makes the protein ectodysplasin and plays an important role in skin development.

* TP-508 is a specific 23 amino acid peptide representing a receptor-binding domain of thrombin reverses damaging effects of radiation by increasing stem cell proliferation and the 'stemness potential' of intestinal crypts. TP508 could be an effective nuclear countermeasure to delay mortality and increase the number of survivors following a nuclear incident. The TP508 region of thrombin activates cells following injury to initiate tissue repair and protect cells from damage caused by hypoxia or radiation. Recent animal studies and human clinical trials with TP508 show significant improvement in healing and revascularization of dermal wounds and bone fractures. The peptide drug TP508 was developed for use in stimulating repair of skin, bone and muscle tissues. It has previously been shown to begin tissue repair by stimulating proper blood flow, reducing inflammation and reducing cell death. In human clinical trials, the drug has

been reported to increase healing of diabetic foot ulcers and wrist fractures with no drug-related adverse events.

* Ticagrelor is a platelet aggregation inhibitor drug. Ticagrelor is indicated for the prevention of thrombotic events (for example stroke or heart attack) in people with acute coronary syndrome or myocardial infarction with ST elevation. There is no high quality evidence for the use of ticagrelor in non-ST elevation acute coronary syndrome. The normal course of ST segment reflects a certain sequence of muscular layers undergoing repolarization and certain timing of this activity. When the cardiac muscle is damaged or undergoes a pathological process (e.g. inflammation), its contractile and electrical properties change. Usually, this leads to early repolarization, or premature ending of the systole.

* Tranexamic acid is a synthetic analog of the amino acid lysine. It is used to treat or prevent excessive blood loss during surgery and in various medical conditions or disorders (helping hemostasis). Tranexamic acid has been found to decrease the risk of death in people who have significant bleeding due to trauma. However, its benefit only appears to be within the first three hours. Used also as firstline nonhormonal treatment of dysfunctional uterine bleeding, and heavy bleeding associated with uterine fibroids. In obstetrics, tranexamic acid is used after delivery to reduce bleeding, often with syntocinon/oxytocin and fundal massage. In hemophilia, tranexamic acid is also useful in the treatment of bleeding as a second line treatment after factor VIII in patients (e.g. tooth extraction). Tranexamic acid has shown to provide rapid and sustained lightening in melasma by decreasing melanogenesis in epidermal melanocytes. TXA has been shown to be effective in reducing risk of secondary hemorrhage outcomes in patients with traumatic hyphema -blood in the front (anterior) chamber of the eye.

* Tylotoin peptide was found to exert the ability to promote wound healing with epidermal growth factor (EGF). In a murine model of a full thickness dermal wound, Tylotoin directly enhances the motility and proliferation of keratinocytes, vascular endothelial cells and fibroblasts, resulting in accelerated re-epithelialization and granulation tissue formation in the wound site. Tylotoin also promotes the release of transforming growth factor beta1 and interleukin 6, which are essential in the wound healing response.

* Varenicline is a drug used to treat nicotine addiction. Varenicline is a nicotinic receptor partial agonist —it stimulates nicotine receptors more weakly than nicotine itself does. In this respect it is similar to cytisine and different from the nicotinic antagonist, bupropion, and nicotine replacement therapies (NRTs) like nicotine patches and nicotine gum. As a partial agonist it both reduces cravings for and decreases the pleasurable effects of cigarettes and other tobacco products. Through these mechanisms it can assist some patients to quit smoking.

* hLF 1–11 is a cationic peptide fragment comprising amino-terminal amino acids 1–11 of human lactoferricin to treat bacteraemia and fungal infections in immuno-compromised haematopoetic stem cell transplant recipients.

1.3.1.22 RT-MB-19

https://archive.org/details/Resonant_Therapy-Molecular_Biology_19

AdoPep1 Peptide, CEPO, Cat-Cathelicidin Polypeptides, Cat-Filaggrin Factor, CrAT Factor, DHED, Dalazatide Peptide, Dasatinib, Deoxyribonucleic Acid-DNA, Dog-Cathelicidin Polypeptide, FSTL-1 Factor, Folinic Acid, GPW-105 Peptide, GsTMx4-Dynasore, IRL-1620, LCZ696, Polybia-MP1 Peptide, Polytrim, Prostacyclin, Pyrimethamine, RGFP966, RWJ-56110, Ribonucleic-Deoxyribonucleic Acids, Ribonucleic Acid-RNA, SCH-23390, Sulfadiazine, T-2328, Tomatidine, Ursolic Acid, Vorapaxar

* ADoPep1 peptide exhibits significant angiogenic properties under hypoxic conditions as determined by cell proliferation, migration and tube formation. In a mouse hind limb ischemia model, a single injection of the peptide restored blood perfusion. ADoPep1 was found to activate GRP78 on endothelial cell membrane and siRNA directed against the GRP78 mRNA interfered with induction of angiogenesis by the peptide. The peptide binding induced a decrease in heat shock protein GRP78 that is overexpressed under hypoxic conditions. The mechanism of peptide-induced angiogenic activity involves inhibition of apoptosis as well as increased Akt phosphorylation and ERK 1/2 activation. ADoPep1 does not induce VEGF receptor-2 protein synthesis and phosphorylation, suggesting a VEGF-independent mechanism of angiogenesis.

* CEPO or carbamylated erythropoietin is formed by the chemical modification of the amino acid lysine to homocitrulline. It changes the receptor-binding capability of the EPO molecule. CEPO has a half-life of 4–6 hours. It is now known that EPO receptors are present in human skeletal muscle and their expression is elevated in chronic limb ischemia (CLI). It has also been shown that nonhaematopoietic derivatives of EPO decrease inflammation and apoptosis of ischaemic myotubes and may thus be used to selectively enhance the tissue- protective activity of EPO whilst avoiding the haematopoietic side effects in CLI. CEPO improved motor behavior and reduced motoneuron loss and astrocyte and microglia activation in the cervical spinal cord of wobbler mice, an animal model of amyotrophic lateral sclerosis, but had no effect on hematocrit values. CEPO like the parent compound EPO, protected primary motoneuron cultures from kainate-induced death in vitro. Both EPO receptor and the common CD131 beta chain were expressed in cultured motoneurons and in the anterior horn of wobbler mice spinal cord. Research results strongly support a role for the common beta chain CD131 in the protective effect of EPO derivatives on motoneuron degeneration.

* Cat-cathelicidins combines two cat's endogenous cathelicidins. Cathelicidins serve a critical role in mammalian innate immune defense against invasive bacterial infection.

* Cat-filaggrin factor FLG2 is a predicted sequence of the cat's specific filament-

associated protein that binds to keratin fibers in epithelial cells. Filaggrin is essential for the regulation of epidermal homeostasis. Within the stratum corneum, filaggrin monomers can become incorporated into the lipid envelope, which is responsible for the skin barrier function. Alternatively, these proteins can interact with keratin intermediate filaments. Filaggrin undergoes further processing in the upper stratum corneum to release free amino acids that assist in water retention.

* Carnitine acetyltransferase (CrAT) converts a key metabolic molecule into a different compound called acetylcarnitine. Acetylcarnitine and CrAT offer an option for tiring muscles, a reserve which functions when there's a sudden change in energy demand. When muscles run low on gas, they turn to acetylcarnitine to release metabolic raw materials they need for energy- producing reactions. But CrAT is ambivalent, and it can also orchestrate the opposite reaction, breaking up acetylcarnitine. Another research suggests that instead of releasing the key metabolic molecule during energy shortages, acetylcarnitine stashes the molecule so that it doesn't interfere with power- producing reactions. Tests haven't established that either acetylcarnitine and the related compound carnitine improve muscle endurance. Still, they could benefit some people whose levels of carnitine or CrAT have declined, such as older folks and individuals who are obese or have diabetes.

* DHED a small-molecule bioprecursor prodrug converts to 17beta-estradiol in the brain after but remains inert in the rest of the body. This prodrug selectively produces estrogen in the brain without peripheral responses associated with the use of systemic estrogens, such as stimulation of the uterus and estrogen-responsive tumor growth. DHED may safely provide estrogen neuroprotection and medicate neurological and psychiatric symptoms developing from estrogen deficiency, particularly those encountered after surgical menopause, without the adverse side effects of current hormone therapies. The prodrug DHED selectively delivers 17beta-estradiol to the brain for treating estrogen-responsive disorders.

* Dalazatide peptide, originally derived from a sea anemone toxin, is a selective inhibitor of Kv1.3 channels. Dalazatide or ShK-186, ameliorates autoimmune diseases and it also enhances metabolic activity with potential as a treatment for obesity and insulin resistance.

* Dasatinib is a cancer drug and quercetin, a natural compound sold as a supplement that acts as an antihistamine and anti-inflammatory. Dasatinib eliminates senescent human fat cell progenitors, while quercetin is more effective against senescent human endothelial cells and mouse bone marrow stem cells. A combination of the two is most effective to selectively induce death of senescent cells. Senescent cells —cells that have stopped dividing— accumulate with age and accelerate the aging process. Like cancer cells, senescent cells have increased expression of "pro-survival networks" that help them resist apoptosis or programmed cell death. In animal models, these compounds improved cardiovascular function and exercise endurance, reduced osteoporosis and frailty, and extended healthspan. Both drugs have possible side effects, at least with long-term treatment notes Scripps Research.

* DNA stands for deoxyribonucleic acid. DNA contains genetic instructions that are used in the growth, development and body functioning of all living organisms and a few viruses. The primary function of DNA molecules is the storage of constitutional information of a living being for a very long period. DNA is the chief component of living body tissues. When the DNA of the cells gets damaged, the body becomes incapable of functioning properly. This results in illness, premature and negative effects of aging on the body. Factors like occurrence of diseases and aging cause damage to the genetic code. DNA helps to relieve the symptoms of damaged or spoiled genetic code. It also helps restore missing genetic code.

* Dog cathelicidin is a naturally occurring peptide found in the white blood cells of dogs, kills microbes like bacteria, viruses and yeast. It's a fairly simple defensive system, and everything from bacteria to humans produce these peptides. The antimicrobial peptides that each species produces are unique and hardwired to an organism's DNA, giving certain species certain resistances. For example, the immune system in dogs may be able to kill certain pathogens extremely well while the immune system in humans is not. Cathelicidins are peptides that play a central role in the early innate immunity against infections.

* Follistatin-like 1 (FSTL1) protein seems to have a cardioprotective role. FSTL1 attenuated hypertrophy following pressure overload and prevented myocardial ischemia/reperfusion injury in a mouse or pig model of ischemia/reperfusion. Muscle-derived Fstl1 modulates vascular remodelling in response to injury.

* Folinic acid is a vitamer for folic acid, and has the full vitamin activity of this vitamin. Folinic acid is sometimes used to reduce the side effects of methotrexate in rheumatoid arthritis, and chemotherapy patients. It is used in combination with the chemotherapy agent 5-fluorouracil in treating colon cancer. In this case, folinic acid enhances the effect of 5-fluorouracil by inhibiting thymidylate synthase. Folinic acid is also sometimes used to prevent toxic effects of high doses of antimicrobial dihydrofolate reductase inhibitors such as trimethoprim and pyrimethamine. It may be prescribed in the treatment of toxoplasmosis retinitis, in combination with the folic acid antagonists pyrimethamine and sulfadiazine. Research has suggested a role for folinic acid in the treatment of anxiety and depression in people with a variant of the MTHFR gene.

* GPW-105 peptide induced activation of formyl peptide receptor 2 stimulates ischemic neovasculogenesis by promoting homing of endothelial colony forming cells. GPW-105 attenuates severe hind limb ischemia and promotes neovascularization in ischemic limb. GPW-105 is a selective agonist of the Formylpeptide receptors (FPR2 and FPR3) and was discovered by screening peptide libraries for their ability to stimulate inositol phosphates in lymphocyte cell lines. It is also an agonist of FPR11. FPR2 is expressed in the promyelocytic leukemia cell line HL-60 as well as in the chronic myelogenous leukemia cell line K562. GPW-105 also inhibits the infection of human peripheral monocyte– derived macrophages and CD41 T lymphocytes by strains of HIV-1, via sensitization of chemokine receptors (CXCR4 and CCR5), following FPR2 activation.

* GsMTx4 peptide from tarantula venom protects articular chondrocytes from mechanically induced cell death via inhibition of Piezo1/2. Piezo1 and Piezo2 channels' synergy confers high-strain mechanosensitivity to articular cartilage. Directed coexpression of Piezo1 and Piezo2 potentiates mechanically induced Ca2+ signals and transmembrane currents. Simple attenuation of Piezo expression leads to attenuation of mechanical sensitivity to injurious strain. Piezo1/2-mediated mechanotransduction pathway modulates chondrocyte injury, and blocking this pathway is protective. GsMTx4 is a potentially useful therapeutic agent for targeting Piezo1/2 so that progressive cartilage degeneration following joint trauma can hopefully be addressed more rationally. GsMTx4' potency is 20-fold increased by dynasore, a dynamin GTPase inhibitor. Chondrocyte death has been proposed as an important mechanism leading to posttraumatic arthritis following traumatic joint injury. PIEZO1/2, functionally expressed in joint cartilage, provide novel molecular targets for reducing cell death and mitigating injury-induced cartilage degeneration following joint trauma. Thus, targeting Piezos could potentially serve as a therapy for posttraumatic osteoarthritis. In this regard, GsMTx4 may be able to serve as a chondroprotective agent to prevent and treat osteoarthritis and other mechanically induced forms of the disease such as those caused by joint instability, misalignment, or obesity, by altering pathologic mechanical signal transduction pathways.

* IRL-1620, an endothelin receptor type B agonist prevents beta amyloid induced oxidative stress and cognitive impairment in normal and diabetic rats. It improved both acquisition (learning) and retention (memory) on water maze task and reduced oxidative stress parameters. It can be speculated that ETB receptor stimulation prevents cognitive impairment and may be useful in neurodegenerative diseases. IRL-1620 significantly enhanced also the uptake and efficacy of anticancer agents in prostate cancer.

* LCZ696 (valsartan/sacubitril) is a combination drug for use in heart failure. It consists of the angiotensin receptor blocker valsartan and the neprilysin inhibitor sacubitril, in a 1:1 mixture by molecule count. The combination is sometimes described as an "angiotensin receptor-neprilysin inhibitor" (ARNi).

* Polybia-MP1 peptide is an helical peptide extracted from the venom of a Brazilian wasp, it has broad-spectrum antimicrobial activities without being hemolytic or cytotoxic. This peptide has also displayed anticancer activity against cancer cell cultures. Its activity is attributed to the excess of serine (PS) on the outer leaflet of cancer cells. Recently, higher quantities of ethanolamine (PE) were also found in these cells. The permeabilization effect due to MP1 action is dependent on the lipid composition. Presence of PE increases the rate and the extent of dye leakage, suggesting that it has important influence on MP1's potency, giving basis for the peptide specificity for cancer cells.

* Polytrim is an antimicrobial compound for ophthalmic use in the treatment of acute bacterial conjunctivitis and blepharoconjunctivitis.

* Prostacyclin is a prostaglandin member of the family of lipid molecules known as eicosanoids. Prostacyclin (PGI2) chiefly prevents formation of the platelet plug involved in primary hemostasis (a part of blood clot formation). It does this by inhibiting platelet activation. It is also an effective vasodilator.

* Pyrimethamine is a medication used for protozoal infections. It is commonly used as an antimalarial drug (for both treatment and prevention of malaria), and when combined with the sulfonamide antibiotic sulfadiazine) to treat Toxoplasma gondii infections in immunocompromised patients, such as HIV-positive individuals. Pyrimethamine is typically given with a sulfonamide and folinic acid. It is primarily active against Plasmodium falciparum, but also against Plasmodium vivax. Due to the emergence of pyrimethamine-resistant strains of P. falciparum, pyrimethamine alone is seldom used now. It also has been used in the treatment of actinomycosis and isosporiasis, and for the treatment and prevention of Pneumocystis jirovecii pneumonia. Pyrimethamine can increase beta-hexosaminidase activity, thus potentially slowing down the progression of late-onset Tay–Sachs disease. It is being evaluated in clinical trials as a treatment for amyotrophic lateral sclerosis.

* RGFP966 is a drug now being used in cancer therapies to stop the activation of genes that turn normal cells into cancerous ones. Moreover, new research shows it made rats made more attuned to what they were hearing, able to retain and remember more information, and develop new connections that allowed these memories to be transmitted between brain cells. People learning to speak again after a disease or injury as well as those undergoing cochlear implantation to reverse previous deafness, may be helped by this type of therapeutic treatment. The application could even extend to people with delayed language learning abilities or people trying to learn a second language. People normally remember an experience with limited detail -not everything we see, hear and feel is remembered. RGFP966, a HDAC3 inhibitor helps memory become closer to a snapshot of the actual experience instead of being sparse, limited or inaccurate.

* RWJ-56110 is a selective protease-activated receptor-1 (PAR1) antagonist; displays no activity at PAR2, PAR3, or PAR4 subtypes. Blocks thrombin-induced platelet aggregation and activation of MAPK in HUVECs. Also inhibits angiogenesis in a chick embryo angiogenesis model in vivo. Antagonists of the thrombin–protease-activated receptor (PAR)-1 interaction may provide benefits in arterial thrombosis patients.

* RNA (ribonucleic acid) and DNA (deoxyribonucleic acid) is a combination of chemicals called nucleotides that are made by the body. They appear to be essential under conditions of rapid growth such as intestinal development, liver surgery or injury, and also during challenges to the immune system. People take RNA/DNA combinations to improve memory and mental sharpness, treat or prevent Alzheimer's disease, treat depression, increase energy, tighten skin, increase sex drive, and counteract the effects of aging.

* RNA stands for ribonucleic acid. RNA is used to treat skin conditions such as eczema and psoriasis, as well as hives and shingles. RNA plays many biological roles that involve the coding and expression of genes. Viruses may also use RNA to encode their genes. RNA also performs many functions in multi-cell organisms, including catalyzing biochemical reactions, responding to cellular signals and regulating gene expression. The primary value of RNA is its ability to assist in the rapid proliferation of cells. This property is especially useful during surgery, injury and attacks on the immune system.

* SCH-23390 is a synthetic compound that acts as a D1 receptor antagonist and has either minimal or negligible effects on the D2 receptor. In rats SCH 23390 offered significant protection from death in dextroamphetamine overdosage, without providing protection from death by methamphetamine overdose. This suggested that d-amphetamine and methamphetamine at high (lethal) doses have different mechanisms of toxicity in rats. The compound provides significant protection from cocaine overdose in rats only at the lowest dose tested in the measurement series. D1 dopamine receptor also regulates alcohol-motivated behaviors. The compound has tranquilizing effects, inhibits conditioned avoidance response, impairs memory acquisition, produces dose-dependent catalepsy, blocks central serotonin receptors, reduces the lethal effects of cocaine, and helps alcohol withdrawal.

* Sulfadiazine is a sulfonamide antibiotic for opportunistic infections and coinfections. An opportunistic infection is an infection that occurs more frequently or is more severe in people with weakened immune systems. It eliminates bacteria that cause infections such as urinary tract infections, ear infections, meningitis, malaria, toxoplasmosis, and others. It is also used to prevent infections in people who are at risk. It will not work for colds, flu, or other viral infections. It works by stopping the production of folate inside the bacterial cell. In combination, sulfadiazine and pyrimethamine, can be used to treat toxoplasmosis, a disease caused by Toxoplasma gondii.

* T-2328 is a non-peptide antagonist of the tachykinin NK1 family. T-2328 treats both acute and delayed emesis. It is proposed to exert its anti-emetic effect through acting on brain NK1 receptors. T-2328 is both very potent and highly selective for NK1 receptors. Neurokinin 1 (NK1) antagonists are a novel class of medications that possesses unique antidepressant, anxiolytic, hypnotic, and antiemetic properties. The discovery of neurokinin 1 (NK1) receptor antagonists was a turning point in the prevention of nausea and vomiting associated with cancer chemotherapy. The tachykinin receptor 1 also known as neurokinin 1 receptor (NK1R) or substance P receptor (SPR) is a G protein coupled receptor found in the central nervous system and peripheral nervous system. The endogenous ligand for this receptor is Substance P, although it has some affinity for other tachykinins. The binding of SP to the NK1 receptor has been associated with the transmission of stress signals and pain, the contraction of smooth muscles and inflammation. Other diseases in which the NK1 receptor system is involved include asthma, rheumatoid arthritis and gastrointestinal disorders. This receptor is considered an attractive drug target, particularly with regards to potential analgesics and anti-depressants. It was identified as a candidate in the etiology of bipolar disorder by a 2008 study, and alcoholism.

* Tomatidine is a steroidal alkaloid found in skins and leaves of tomatoes. It has been shown to suppress NF-kappaB signaling in LPS-stimulated macrophages, blocking induced expression of iNOS and COX-2. It is a reported functional inhibitor of acid sphingomyelinase. Tomatidine also has antibacterial properties, blocking the replication of S. aureus variants that are pathogenic in cystic fibrosis more potently than normal strains. It prevents skeletal muscle atrophy associated with fasting or spinal cord injury in mice. By reducing ATF4 activity, tomatidine allow skeletal muscle to recover from effects of aging.

* Ursolic acid is a pentacyclic triterpenoid identified in the epicuticular waxes of apples as early as 1920 and widely found in the peels of fruits, as well as in herbs and spices like rosemary and thyme. In vitro, ursolic acid inhibits the proliferation of various cancer cell types by inhibiting the STAT3 activation pathway, and may also decrease proliferation of cancer cells and induce apoptosis. Ursolic acid has also been shown to inhibit JNK expression and IL-2 activation of JURKAT leukemic T Cells leading to the reduction in proliferation and T cell activation. Ursolic acid is a weak aromatase inhibitor and has been shown to increase the amount of muscle and brown fat and decrease white fat obesity and associated conditions when added to diets fed to mice. Under physiological concentrations, ursolic acid also induces eryptosis (the apoptosis-like suicidal cell death in defective red blood cells). It has been found to reduce muscle atrophy and to stimulate muscular growth in mice. Ursolic acid reduces ATF4 activity, thus allowing skeletal muscle to recover from effects of aging. It also shows potential for cardioprotection.

* Vorapaxar is a thrombin receptor (protease-activated receptor, PAR-1) antagonist based on the natural product himbacine. Vorapaxar is used in persons with a history of myocardial infarction (heart attack) or persons with peripheral arterial disease. Studies have shown that this medication can reduce the rate of combined endpoint cardiovascular death, MI, stroke, and urgent coronary revascularization. Vorapaxar is an anti-platelet drug that is part of the PAR-1 antagonist family, a new class of anti-platelet drug. It functions by inhibiting thrombin-related platelet aggregation. This mechanism works by a different pathway than other anti-platelet medications such as aspirin and P2Y12 inhibitors. Unlike many other medication, vorapaxar does not affect ADP-mediated platelet aggregation, coagulation parameters, or bleeding time. Vorapaxar is contraindicated for people with a history of stroke, transient ischemic attack, intracerebral hemorrhage or active pathological bleeding.

1.3.1.23 RT-MB-20

https://archive.org/details/Resonant_Therapy-Molecular_Biology_20

ANLE-138B, Baricitinib, Chondroitin Glucosamine MSM, D-Limonene, Decitabine, ESRP1-ESRP2 Factors, Eltrombopag, Fasigliam, Favipiravir, IFNB1 Factor, ITGA-7 Factor, Interferon Alfacon-1, Interferon Beta-1A, Interferon Beta-1B, KJNC-15 Factor, Leptomycin-B, MZ-5-156, Milbemycin Oxime, NR2E1 Factor, Norisoboldine, OSU-6162,

PDE10A Factor, Peginterferon Alfa-2B, Selamectin, Selinexor, Silibinin, TAK-733, Teixobactin, Tetrandrine, Verdinexor,

* Anle138b is a novel oligomer modulator and aggregation inhibitor. In vitro, anle138b blocks the formation of pathological aggregates of prion protein (PrP(Sc)) and of alfa-synuclein (alfa-syn), which is deposited in PD and other synucleinopathies such as dementia with Lewy bodies (DLB) and multiple system atrophy (MSA). Notably, anle138b strongly inhibited all prion strains tested including BSE-derived and human prions. Anle138b showed structure-dependent binding to pathological aggregates and strongly inhibited formation of pathological oligomers in vitro and in vivo both for prion protein and alfa-synuclein. In neurodegenerative diseases such as Alzheimer's disease (AD), Parkinson's disease (PD) and prion diseases, deposits of aggregated disease-specific proteins are found. Oligomeric aggregates are presumed to be the key neurotoxic agent.

* Baricitinib is an efficacious drug in active rheumatoid arthritis patients refractory to disease modifying drugs and biologics. Baricitinib preferentially inhibits JAK1 and JAK2, with 10-fold selectivity over Tyk2 and 100-fold over JAK3. Baricitinib has the dose-limiting side-effect of inducing anaemia which has been attributed to its effects on JAK2 but has clearly shown efficacy. It is also a potential treatment for psoriasis and diabetic nephropathy.

* Chondroitin, glucosamine and methylsulfonylmethane, or MSM, is used to support healthy joints and to reduce pain in those with osteoarthritis and other inflammatory joint problems. Chondroitin is a major constituent of the connective tissue in your body known as cartilage, which helps cushion your joints and prevent your bones from rubbing against each other. Chondroitin absorbs water and other fluids, which helps keep your cartilage hydrated and healthy. Like chondroitin, glucosamine is produced naturally in your body and plays a role in joint health. It helps build and repair cartilage that connects the joints. Glucosamine possesses anti-inflammatory properties. MSM is a sulfur- containing compound that helps support tendons and muscles.

* D-Limonene is a monoterpene found to prevent mammary cancer by activating hepatic glutathione-S-transferase (GST) and uridine diphosphoglucuronosyl transferase (UGT). D-Limonene is an isoprenylation inhibitor of small G-proteins. It is also used as botanical insecticide, the d enantiomer is most active as an insecticide. In natural and alternative medicine, d-limonene is marketed to relieve gastroesophageal reflux disease and heartburn. Limonene is an adenosine agonist which may explain its anti-stress and sedative properties.

* Decitabine is a drug for the treatment of myelodysplastic syndromes, a class of conditions where certain blood cells are dysfunctional, and for acute myeloid leukemia (AML). Chemically, it is a cytidine analog. Decitabine is indicated for the treatment of myelodysplastic syndromes (MDS) including previously treated and untreated, de novo

and secondary MDS of all French- American-British subtypes (refractory anemia, refractory anemia with ringed sideroblasts, refractory anemia with excess blasts, refractory anemia with excess blasts in transformation, and chronic myelomonocytic leukemia) and Intermediate-1, Intermediate-2, and High-Risk International Prognostic Scoring System groups. It is also reportedly feasible in patients with renal insufficiency. Decitabine priming enhances the antileukemic effects of exportin 1 (XPO1) selective inhibitor selinexor in acute myeloid leukemia.

* Esrp1 (epithelial splicing regulatory protein 1) and Esrp2 (epithelial splicing regulatory protein 2) are two closely related proteins that regulate alternative splicing in epithelial cells. These specialized cells form sheets that line most organs in the body and are found in the epidermis, the outermost layer of the skin. Recent research found that mice that only lacked Esrp1 developed a cleft lip and palate. In mice that lacked both proteins, many organs failed to develop correctly and in some cases did not form at all. In the epidermis, the loss of Esrp1 and Esrp2 disrupted the splicing of the transcripts from genes that give epithelial cells many of their specialized characteristics, such as the ability to form sheets of cells with well-formed junctions between them. Thus, epidermis comprising cells that lacked Esrp1 and Esrp2 could not form a proper barrier layer, which is a crucial role of epithelia in skin as well as in other organs.

* Eltrombopag is a medication that has been developed for conditions that lead to thrombocytopenia (abnormally low platelet counts). It is a small molecule agonist of the c-mpl (TpoR) receptor, which is the physiological target of the hormone thrombopoietin. It is used in patients with aplastic anemia for which immunosuppression has not been successful. It has been shown to produce a trilineage hematopoesis in some patients with aplastic anemia, resulting in increased platelet counts, along with red and white blood cell counts. In preclinical studies, the compound was shown to interact selectively with the thrombopoietin receptor, leading to activation of the JAK-STAT signaling pathway and increased proliferation and differentiation of megakaryocytes. Eltrombopag has been shown to be effective, in two major clinical syndromes: idiopathic thrombocytopenic purpura and cirrhosis due to hepatitis C. ITP is an autoimmune disorder where the immune system attacks platelets and blood fails to clot as it should.

* Fasiglifam is a drug that works by boosting the release of insulin from pancreatic B cells, but only when diabetics need it most –such as when glucose and fatty acids rise in the blood after a meal. Fasigliam, a new treatment for type 2 diabetes, improves blood sugar control and is equally effective as glimepiride, but has a significantly lower risk of creating a dangerous drop in blood sugar -hypoglycemia. Fasigliam is designed to enhance insulin secretion in a glucose-dependent manner, which means that it has no effect on insulin secretion when glucose levels are normal, and as such has the potential to improve the control of blood sugar levels without the risk of hypoglycemia.

* Favipiravir is an experimental antiviral drug with activity against many RNA viruses. It is a pyrazinecarboxamide derivative active against influenza viruses, West Nile virus, yellow fever virus, foot-and-mouth disease virus as well as other flaviviruses, arenaviruses, bunyaviruses and alphaviruses. Activity against enteroviruses Lassa fever

and Rift Valley fever virus has also been demonstrated. During the 2014 Ebola outbreak tests Favipiravir was proven effective in patients with low-to-moderate levels of Ebola virus in the blood. The mechanism of its actions is thought to be related to the selective inhibition of viral RNA-dependent RNA polymerase. Favipiravir does not inhibit RNA or DNA synthesis in mammalian cells and is not toxic to them.

* IFNB1 factor or interferon beta 1 in humans is the protein encoded by the IFNB1 gene. The natural and recombinant protein forms have antiviral, antibacterial, and anticancer properties. Recent research has discovered that non-inheritable Parkinson's disease PD may be caused by functional changes in the immune regulating gene Interferon-beta (IFNB). Treatment with IFNB-gene therapy successfully prevented neuronal death and disease effects in an experimental model of PD. Researchers found that mice missing IFNB developed Lewy bodies in parts of the brain, which control body movement and restoration of memory, and as a result they developed disease and clinical signs similar to patients with PD and dementia with Lewy bodies (DLB).

* ITGA-7 factor or alpha-7 integrin is a protein that in humans is encoded by the ITGA7 gene. Alpha-7 integrin is critical for modulating cell-matrix interactions. Alpha-7 integrin is highly expressed in cardiac muscle, skeletal muscle and smooth muscle cells, and localizes to Z-disc and costamere structures. Mutations in ITGA7 have been associated with congenital myopathies and noncompaction cardiomyopathy, and altered expression levels of alpha-7 integrin have been identified in various forms of muscular dystrophy. Mutations in ITGA7 have been found in patients with unclassified congenital myopathy. Increased expression of ITGA7 significantly extended longevity and reduced its common features, including kyphosis in mice deficient for dystrophin and utrophin. Overexpression of alpha7 expression protected against loss of force following contraction-induced damage, and increased specific force in the diaphragm and EDL (extensor digitorum longus) muscles eight weeks after gene transfer.

* Interferon alfacon-1 is a recombinant synthetic type I interferon used for the treatment of hairy cell leukemia, malignant melanoma and AIDS-related Kaposi's sarcoma.

* Interferon beta 1a is a cytokine in the interferon family used to treat multiple sclerosis (MS) produced by mammalian cells. Interferon beta balances the expression of pro- and anti-inflammatory agents in the brain, and reduces the number of inflammatory cells that cross the blood brain barrier. Overall, therapy with interferon beta leads to a reduction of neuron inflammation. Moreover, it is also thought to increase the production of nerve growth factor and consequently improve neuronal survival. In vitro, interferon beta reduces production of Th17 cells which are a subset of T lymphocytes believed to have a role in the pathophysiology of MS.

* Interferon beta 1b is a cytokine in the interferon family used to treat the relapsing-remitting and secondary-progressive forms of multiple sclerosis (MS). It is produced in modified E. coli. Interferon beta balances the expression of pro- and anti-inflammatory agents in the brain, and reduces the number of inflammatory cells that cross the blood brain barrier. Overall, therapy with interferon beta leads to a reduction of neuron

inflammation. Moreover, it is also thought to increase the production of nerve growth factor and consequently improve neuronal survival.

* KCNJ15 or potassium inwardly-rectifying channel, subfamily J, member 15 is a human gene, which encodes the Kir4.2 protein. Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. Kir4.2 is an integral membrane protein and inward-rectifier type potassium channel. Kir4.2 has a greater tendency to allow potassium to flow into a cell rather than out of a cell. Three transcript variants encoding the same protein have been found for this gene. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. A variety of animals are able to sense and react to electric fields, and living human cells will move along an electric field, for example in wound healing. New research has found the first actual "sensor mechanism" that allows a living cell detect an electric field. Two elements, the protein Kir4.2 (KCNJ15) and molecules within the cell called polyamines, are needed for signaling to occur. Polyamines are molecules within the cell that carry a positive charge.

* Leptomycin B is a potent and specific nuclear export inhibitor in humans. Leptomycin B alkylates and inhibits CRM1 (chromosomal region maintenance) exportin 1 (XPO1). In addition to antifungal and antibacterial activities, Leptomycin B blocks the cell cycle and is a potent anti-tumor agent. At low nM concentrations, Leptomycin B blocks the nuclear export of many proteins including HIV-1 Rev, MAPK/ERK, and NF-kappaB/IkappaB, and it inhibits the inactivation of p53. Leptomycin B also inhibits the export and translation of many RNAs, including COX-2 and c-Fos mRNAs, by inhibiting export of ribonucleoproteins. Recent research in yeast suggests that deleting the gene LOS1 or Exportin-T -human XPO1 equivalent- produced particularly impressive results, extending life by 60 per cent. LOS1 is linked to a genetic master switch which has long been associated with calorie restriction through fasting and increased lifespan.

* MZ-5-156, a growth hormone-releasing hormone (GHRH) antagonist has positive effects on oxidative stress in the brain, improving cognition, telomerase activity (the actions of an enzyme which protects DNA material) and life span, while decreasing tumor activity. MZ-5-156, like many GHRH antagonists, inhibits several human cancers, including prostate, breast, brain and lung cancers. It also has positive effects on learning, and is linked to improvements in short-term memory. The antioxidant actions leads to less oxidative stress, reversing cognitive impairment.

* Milbemycin oxime is a veterinary drug from the group of milbemycins, used as a broad spectrum antiparasitic. It is active against worms (anthelmintic), insects (insecticide) and mites (miticide). Like avermectins, milbemycins are products of fermentation by Streptomyces species. They have a similar mechanism of action, but a longer half-life than the avermectins. Milbemycin oxime is produced by Streptomyces hygroscopicus aureolacrimosus. It opens glutamate sensitive chloride channels in neurons and myocytes of invertebrates, leading to hyperpolarisation of these cells and blocking of

signal transfer. Milbemycin oxime is active against a broad spectrum of nematodes. Its miticide spectrum includes Sarcoptes and Demodex. The drug is used for treatment and prevention of heartworm in dogs and cats. In humans, has therapy potential for rosacea, ophtalmic pathologies and onchocerciasis. Also effective in Buruli ulcers, though Selamectin is somehow a better choice for this purpose.

* NR2E1 factor is part of a large protein interactome of disease genes with a clinical picture marked by aggression, suggesting that this transcriptional module may be part of a larger network of proteins that also regulate aggression in humans. Aggression is pervasive throughout the animal kingdom and is both a beneficial and costly behavior. The orphan nuclear receptor Nr2e1 and its associated co-repressors affect aggressive behavior in both flies and mice, and evidence in flies shows that its effect on aggressive behavior depends on the neurosecretory function of a very small number of neurons in the adult brain.

* Norisoboldine, the major isoquinoline alkaloid in Radix Linderae, has a proven ability to prevent lipopolysaccharide-induced in vitro activation of macrophages and the resultant production of pro-inflammatory cytokines. Rheumatoid arthritis (RA) is a chronic inflammatory disease characterized by synovial inflammation, erosion of bone and cartilage, and severe joint pain. Joint destruction ultimately results in reduced mobility of affected patients. RA affects approximately 0.5% of the adult population worldwide, and it occurs in 20–50 cases per 100 000 annually. Norisoboldine alleviates joint destruction in rats with adjuvant-induced arthritis by reducing RANKL, IL-6, PGE2, and MMP-13 expression.

* OSU-6162 is a compound which acts as a partial agonist at both dopamine D2 receptors and 5-HT2A receptors. It can counteract both hyperdopaminergic and hypodopaminergic states, and has antipsychotic, anti-addictive and anti-Parkinsonian effects in animal studies. OSU6162 might be a valuable drug candidate for memory deficits and other cognitive impairments. Coadministration of OSU6162 with L-Dopa normalizes preproenkephalin mRNA expression in the sensorimotor striatum of primates with unilateral 6-hydroxydopamine (6-OHDA) lesions. OSU6162, rescues striatal neurons with normal and expanded polyglutamine chains in huntingtin protein from exposure to free radicals.

* Phosphodiesterase 10A (PDE10A) is a basal ganglia expressed dual substrate enzyme, which regulates cAMP and cGMP signalling cascades, thus having a key role in the regulation of dopaminergic signalling in striatal pathways, and in promoting neuronal survival. Striatal and pallidal loss of PDE10A expression, is associated with Parkinson’s duration and severity of motor symptoms and complications. PDE10A is an enzyme that could be targeted with novel pharmacotherapy to improve dopaminergic signalling and striatal output, and therefore alleviate symptoms and complications of Parkinson’s disease.

* Peginterferon alpha-2b acts as a multifunctional immunoregulatory cytokine by transcribing several genes, including interleukin 4 (IL4). This cytokine is responsible for

inducing T helper cells to become type 2 helper T cells. This ultimately results in the stimulation of B cells to proliferate and increase their antibody production. This ultimately allows for an immune response, as the B cells will help to signal the immune system that a foreign antigen is present. Another major mechanism of type I interferon alpha (IFNalfa) is to stimulate apoptosis in malignant cell lines. One of the major mechanisms of PEG-interferon alpha-2b utilizes the JAK-STAT signaling pathway. Pegylated interferon alfa-2b is a treatment for hepatitis C and melanoma with nodal involvement after surgical resection.

* Selamectin is a parasiticide and antihelminthic for dogs and cats. It treats and prevents infections of heartworms, fleas, ear mites, sarcoptic mange (scabies), and certain types of ticks in dogs, it also prevents heartworms, fleas, ear mites, hookworms, and roundworms in cats. Selamectin disables parasites by activating glutamate-gated chloride channels at muscle synapses. Selamectin activates the chloride channel without desensitization, allowing chloride ions to enter the nerve cells and causing neuromuscular paralysis, impaired muscular contraction, and eventual death. Late studies suggest a potential for malaria control in humans.

* Selinexor is small molecule inhibitor of nuclear export through covalent binding to Exportin 1 (XPO1/CRM1) leading to forced nuclear retention of major tumor suppressor proteins (TSPs) such as p53, FOXO, pRB and IkappaB, resulting in selective death of cancer cells. Selinexor is well tolerated, even with prolonged use. Recent research suggests that deleting a gene in yeast called LOS1 Exportin-T (human XPO1) equivalent produced particularly impressive results, extending life by 60 per cent. LOS1 is linked to a genetic master switch which has long been associated with calorie restriction through fasting and increased lifespan.

* Silibinin is the major active constituent of silymarin, a standardized extract of the milk thistle seeds. Silymarin is the first ingredient in several products sold as herbal telomerase activators, though the research demonstrating silymarin's effectiveness in this regard is proprietary and unpublished. Both in vitro and animal research suggest that silibinin has hepatoprotective (antihepatotoxic) properties that protect liver cells against toxins. Silibinin has also demonstrated in vitro anti-cancer effects against human prostate adenocarcinoma cells, estrogen-dependent and -independent human breast carcinoma cells, human ectocervical carcinoma cells, human colon cancer cells, and both small and nonsmall human lung carcinoma cells. Silibinin has been reported to exert a neuroprotective effect in mice. There is also clinical evidence for the use of silibinin as a supportive element in alcoholic and child grade 'A' liver cirrhosis.

* TAK-733 is a drug wich intercedes in the MAPK signaling pathway, a cascade of cellular communication that controls cell growth and survival and is frequently altered in many cancers (especially including melanoma, non-small cell lung cancer, and colorectal cancer). The drug does this by silencing an essential link in this signaling chain, namely the molecule MEK. Without activity of the MEK kinase, MAPK signaling cannot occur and instead of surviving and proliferating, cancer cells dependent on this pathway die.

* Teixobactin is a small molecule antibiotic that is active against gram-positive bacteria. It appears to belong to a new class of antibiotics, and harms bacteria by binding to lipid II and lipid III, important precursor molecules for forming the cell wall. Teixobactin was reported to be potent in vitro against all gram-positive bacteria tested, including Staphylococcus aureus and difficult-to-treat enterococci, with Clostridium difficile and Bacillus anthracis being exceptionally vulnerable. It also killed Mycobacterium tuberculosis. It was also found to be effective in vivo, when used to treat mice infected with methicillin-resistant S. aureus (MRSA), and Streptococcus pneumoniae.

* Tetrandrine a bis-benzylisoquinoline alkaloid, is a calcium channel blocker. It has anti-inflammatory, immunologic and antiallergenic effects. It inhibits the degranulation of mast cells. It has a "Quinidine like" anti-arrhythmic effect. It has been isolated from Stephania tetrandra, and other Chinese and Japanese herbs. It has vasodilatory properties and can therefore reduce blood pressure. Tetrandrine may have potential use for the treatment of liver disease and liver cancer. Tetrandrine has potential therapeutic value to prevent excess scarring/fibrosis in conjunctiva following trabeculectomy or in patients with severe conjunctival inflammation. Tetrandrine has anti-inflammatory and anti-fibrogenic actions, which make tetrandrine and related compounds potentially useful in the treatment of lung silicosis, liver cirrhosis, and rheumatoid arthritis. Tetrandrine has also been shown to inhibit entry of Ebola virus into host cells in vitro and showed therapeutic efficacy against Ebola in preliminary studies on mice.

* Verdinexor reduces proinflammatory cytokine expression in the lung, produces in vivo antiviral activity by reducing lung virus titers, and thus reduces pulmonary disease pathogenesis and death associated with lethal influenza A virus challenge. In autosomal-dominant polycystic kidney disease model, Verdinexor attenuates cyst growth via inhibition of XPO1. Recent research suggests that deleting a gene in yeast called LOS1 Exportin-T (human XPO1) equivalent produced particularly impressive results, extending life by 60 per cent. LOS1 is linked to a genetic master switch which has long been associated with calorie restriction through fasting and increased lifespan.

1.3.1.24 RT-MB-21

https://archive.org/details/Resonant_Therapy-Molecular_Biology_21

ACTH 1-24 Polypeptide, ARSB Factor, Acarbose, Alfatradiol, Bacillus-Cereus AlkD, C5 Factor, EE-3-SO4, GAA Factor, GBA Factor, GLA Factor, IDS Factor, IDUA FActor, Inositol-Methionine-Choline, Inositol, LEP Factor, Lifitegrast, Lithospermate-B, Masoprocol, Naringenin, Oxoloacetate, Pralatrexate, Progesterone, R-Lipoic Acid, RADA16 Plus EE-3-SO4, Rilonacept, SERPING-1 Factor, Silmitasertib, Sirolimus, Staph-Aureus SSL7, VEGF165 Factor

* ACTH cosyntropin or tetracosactrin is a synthetic peptide and analogue of

adrenocorticotrophic hormone (ACTH) is the natural cleavage product from POMC (pro-opimelanocortin) processing; however, the first 24-amino acid sequence from the carboxyl end, ACTH (1-24) has full biological activity of the (1-39) peptide. Both ACTH (1-24) and (1-39) possess neurotropic activity. Tetracosactide stimulates the release of corticosteroids such as cortisol from the adrenal glands. The adrenocorticotropic hormone (ACTH), causes the adrenal cortex to produce and release glucocorticoids as one branch in the fight-or- flight reaction. Sensing a dangerous or stressful situation causes the hypothalamus to secrete corticotropin-releasing hormone (CRH) directly into the vasculature leading to the anterior pituitary. In response to CRH the anterior pituitary releases ACTH into circulation. Binding of ACTH to its G-protein receptor initiates a signaling cascade leading to glucocorticoid release. These corticosteroids increase blood sugar and brain metabolism, as well as slowing other systems not essential for emergencies. ACTH has been proposed as a therapy to treat refractory autoimmune diseases, refractory nephrotic syndrome due to a variety of glomerular diseases, and infantile spasms, seizures that often affect infants 4 to 6 months of age. Primary adrenal insufficiency, also called Addison's disease, occurs when adrenal gland production of cortisol is chronically deficient, resulting in chronically elevated ACTH levels; when a pituitary tumor is the cause of elevated ACTH (from the anterior pituitary) this is known as Cushing's disease and the constellation of signs and symptoms of the excess cortisol (hypercortisolism) is known as Cushing's syndrome. Conversely, deficiency of ACTH is a cause of secondary adrenal insufficiency, often as a result of hypopituitarism. ACTH is also related to the circadian rhythm in many organisms. (Among the top most expensive meds - ACTH)

* ARSB factor or arylsulfatase B is an enzyme associated with mucopolysaccharidosis VI (Maroteaux-Lamy syndrome). Arylsulfatase B is among a group of arylsulfatase enzymes present in the lysosomes of the liver, pancreas, and kidneys of animals. The purpose of the enzyme is to hydrolyze sulfates in the body. ARSB does this by breaking down glycosaminoglycans(GAGs), which are large sugar molecules in the body. ARSB targets two GAGs in particular: dermatan sulfate and chondroitin sulfate. Over 130 mutations to ARSB have been found, each leading to a deficiency in the body. In most cases, the mutation occurs on a single nucleotide in the sequence. An arylsulfatase B deficiency can lead to an accumulation of GAGs in lysosomes, which in turn can lead to mucopolysaccharidosis VI. (Among the top most expensive meds - Naglazyme)

* Acarbose inhibits enzymes (glycoside hydrolases) needed to digest carbohydrates, specifically, alpha-glucosidase enzymes in the brush border of the small intestines and pancreatic alpha-amylase. Pancreatic alpha-amylase hydrolyzes complex starches to oligosaccharides in the lumen of the small intestine, whereas the membrane-bound intestinal alpha-glucosidases hydrolyze oligosaccharides, trisaccharides, and disaccharides to glucose and other monosaccharides in the small intestine. Inhibition of these enzyme systems reduces the rate of digestion of complex carbohydrates. Less glucose is absorbed because the carbohydrates are not broken down into glucose molecules. In diabetic patients, the short-term effect of these drugs therapies is to decrease current blood glucose levels; the long-term effect is a reduction in HbA1c level. This reduction averages an absolute decrease of 0.7%, which is a decrease of

about 10% in typical HbA1c values in diabetes studies. Since acarbose prevents the degradation of complex carbohydrates into glucose, some carbohydrate will remain in the intestine and be delivered to the colon. In the colon, bacteria digest the complex carbohydrates, causing gastrointestinal side-effects such as flatulence (78% of patients) and diarrhea (14% of patients). If a patient using acarbose suffers from a bout of hypoglycemia, the patient must take something containing monosaccharides, such as glucose. Hepatitis has been reported with acarbose use. It usually goes away when the medicine is stopped. Therefore, liver enzymes should be checked before and during usage. A study on acarbose showed it increased male median lifespan by 22%, but increased female median lifespan by only 5%. This sexual dimorphism in acarbose lifespan effect could not be explained by differences in effects on weight. Maximum lifespan (90th percentile) increased 11% in males and 9% in females.

* Alfatradiol or 17-alfa-estradiol is a 5-alfa-reductase inhibitor used as an androgen, anti-inflammatory and antineoplastic agent used in the treatment of androgenic alopecia (hair loss) in men and women. In contrast to 17-beta- estradiol, 17-alfa-estradiol, while it still binds to the estrogen receptor, has less or no feminizing estrogen activity depending on its dosage and the tissue it is affecting. 17-alfa-estradiol has been researched as a therapeutic with potential to treat Alzheimer's and Parkinson's disease and other patients suffering from neurodegenerative diseases. A study on alfatradiol showed it increased male median lifespan by 12%, though it did not lead to a significant effect on maximum lifespan. The benefits of alfatradiol were much stronger at one test site than at the other two and were not explained by effects on body weight. Alfatradiol did not alter female lifespan.

* Bacillus cereus AlkD factor or DNA alkylation repair enzyme works in a totally different fashion to other repair enzymes. It does not require base flipping to recognize damaged DNA or repair it. Recent research determined that the enzyme was able to locate damaged DNA that has a positive electrical charge. Positively charged alkylated bases are among the most abundant and detrimental forms of DNA damage. AlkD forms a series of interactions with the DNA backbone at and around the lesion while the lesion is still stacked in the double helix. The mechanism capitalizes on intrinsic properties of the lesion, base mispairing and glycosidic bond instability, but does not depend on the specific geometry of the lesion. This allows AlkD to find and remove a wide variety of alkylated bases while guaranteeing that it does not cleave bases from native DNA. Humans may even have DNA-repair enzymes that operate in a similar fashion to remove complex types of DNA damage. There are two basic sources of DNA damage or lesions: environmental sources including ultraviolet light, toxic chemicals and ionizing radiation and internal sources, including a number of the cell's own metabolites (the chemicals it produces during normal metabolism), reactive oxygen species and even water.

* C5 or complement component 5 is a protein that in humans is encoded by the C5 gene. Complement component 5 is involved in the complement system. It is cleaved into C5a and C5b. C5a plays an important role in chemotaxis. C5b forms the first part of the complement membrane attack complex. Deficiency is thought to cause Leiner's

disease. Complement component 5 is the fifth component of complement, which plays an important role in inflammatory and cell killing processes. This protein is composed of alpha and beta polypeptide chains that are linked by a disulfide bridge. An activation peptide, C5a, which is an anaphylatoxin that possesses potent spasmogenic and chemotactic activity, is derived from the alpha polypeptide via cleavage with a convertase. The C5b macromolecular cleavage product can form a complex with the C6 complement component, and this complex is the basis for formation of the membrane attack complex, which includes additional complement components. Mutations in this gene cause complement component 5 deficiency, a disease where patients show a propensity for severe recurrent infections. Defects in this gene have also been linked to a susceptibility to liver fibrosis and to rheumatoid arthritis. The drug eculizumab (Soliris) prevents cleavage of C5 into C5a and C5b. (Among the top most expensive meds - Soliris)

* EE-3-SO4 is a drug derived from the female hormone estrogen that may help patients with severe bleeding survive long enough to get to appropriate medical care. It is extremely effective in improving cardiovascular functions and boosting survival rates following injuries with extreme hemorrhage. EE-3-SO4 could have major implications for treating trauma, from battlefield injuries to life threatening hemorrhage following any injury. Severely hemorrhaging patients -those who experience approximately 40 percent or more blood loss- who do not receive fluid or blood product resuscitation within a few hours usually do not survive. EE-3-SO4 does not stop a patient from bleeding, but appears to help the body respond to extreme blood loss by mobilizing a variety of physiologic mechanisms. The drug appears to work in three ways. It helps the heart beat more efficiently, enabling it to fully expand and contract while pumping to maximize blood flow. It lowers resistance to blood flow to vital organs, and then gradually elevates blood pressure and promotes sufficient blood flow throughout the body. It recruits fluid from surrounding tissue, increasing blood volume to compensate for blood loss from the wound or injury. The average person has about 10 liters of this interstitial fluid in tissue and about 5 liters of blood.

* GAA or lysosomal alpha-glucosidase is an essential enzyme for the degradation of glygogen to glucose in lysosomes. Mutations affecting this gene cause a metabolic disorder with a broad clinical spectrum. The severe infantile form, or Pompe disease, presents at birth with massive accumulation of glycogen in muscle, heart and liver. Cardiomyopathy and muscular hypotonia are the cardinal features of this form whose life expectancy is less than two years. The juvenile and adult forms present as limb-girdle muscular dystrophy beginning in the lower limbs. Final outcome depends on respiratory muscle failure. Patients with the adult form can be free of clinical symptoms for most of their life but finally develop a slowly progressive myopathy. (Among the top most expensive meds - Myozyme)

* GBA factor or beta-glucocerebrosidase is an enzyme with glucosylceramidase activity that is needed to cleave, by hydrolysis, the beta-glucosidic linkage of the chemical glucocerebroside, an intermediate in glycolipid metabolism. Mutations in the glucocerebrosidase gene cause Gaucher's disease, a lysosomal storage disease

characterized by an accumulation of glucocerebrosides. Mutations in the glucocerebrosidase gene are also associated with Parkinson's disease. (Among the top most expensive meds - Ceredase/Cerezyme)

* GLA factor or alpha-galactosidase is a glycoside hydrolase enzyme that hydrolyses the terminal alpha-galactosyl moieties from glycolipids and glycoproteins. It is encoded by the GLA gene. This enzyme is a homodimeric glycoprotein that hydrolyses the terminal alpha-galactosyl moieties from glycolipids and glycoproteins. It predominantly hydrolyzes ceramide trihexoside, and it can catalyze the hydrolysis of melibiose into galactose and glucose. A variety of mutations in this gene affect the synthesis, processing, and stability of this enzyme, which causes Fabry's disease, a rare lysosomal storage disorder and sphingolipidosis that results from a failure to catabolize alpha-D-galactosyl glycolipid moieties. (Among the top most expensive meds - Fabrazyme)

* IDS factor or iduronate 2-sulfatase is a sulfatase enzyme associated with Hunter syndrome. Iduronate 2-sulfatase is required for the lysosomal degradation of heparan sulfate and dermatan sulfate. Mutations in this X-chromosome gene that result in enzymatic deficiency lead to the sex-linked mucopolysaccharidosis type II, also known as Hunter syndrome. Iduronate- 2-sulfatase has a strong sequence homology with human arylsulfatases A, B, and C, and human glucosamine-6-sulfatase. A splice variant of this gene has been described. (Among the top most expensive meds - Elaprase)

* IDUA factor or iduronidase is an enzyme with the system name glycosaminoglycan alpha-L-iduronohydrolase. This enzyme catalyses the hydrolysis of unsulfated alpha-L-iduronosidic linkages in dermatan sulfate. It is involved in the degeneration of glycosaminoglycans such as dermatan sulfate and heparan sulfate. It is found in the lysosomes of cells. A deficiency in the IDUA protein is associated with mucopolysaccharidoses (MPS). MPS, a type of lysosomal storage disease, is typed I through VII. Type I is known as Hurler syndrome and type I,S is known as Scheie syndrome, which has a milder prognosis compared to Hurler's. In this syndrome, glycosaminoglycans accumulate in the lysosomes and cause substantial disease in many different tissues of the body. IDUA mutations result in the MPS 1 phenotype, which is inherited in an autosomal recessive fashion. The defective alpha-L-iduronidase results in an accumulation of heparan and dermatan sulfate within phagocytes, endothelium, smooth muscle cells, neurons, and fibroblasts. (Among the top most expensive meds - Aldurazyme)

* Inositol, methionine, and choline can support proper kidney function and treat a number of kidney problems. Inositol can help prevent the development of kidney stones and, because of the antioxidant properties inositol is believed to display, it is also thought to prevent tissue damage in the kidneys. Methionine can help repair the oxidative that the kidney experiences while it filters potentially harmful toxins out of the blood. Choline is required for the production of betaine, a compound used by the kidneys to regulate water levels in the body. Insufficient amounts of choline in the body are linked to impaired kidney function, including problems with filtering and

concentrating urine, and possible kidney failure.

* Inositol is a vitamin-like substance. It is found in many plants and animals. It can also be made in a laboratory. Inositol is used for diabetic nerve pain, panic disorder, high cholesterol, insomnia, cancer, depression, schizophrenia, Alzheimer's disease, attention deficit-hyperactivity disorder (ADHD), autism, promoting hair growth, a skin disorder called psoriasis, and treating side effects of medical treatment with lithium. Inositol is also used for treating conditions associated with polycystic ovary syndrome, including failure to ovulate; high blood pressure; high triglycerides; high uric acid levels; and high levels of testosterone.

* LEP factor or leptin the "satiety hormone," is a hormone made by adipose cells that helps to regulate energy balance by inhibiting hunger. Leptin is opposed by the actions of the hormone ghrelin, the "hunger hormone". Both hormones act on receptors in the arcuate nucleus of the hypothalamus to regulate appetite to achieve energy homeostasis. In obesity, a decreased sensitivity to leptin occurs, resulting in an inability to detect satiety despite high energy stores. According to new research leptin aids weight loss without the significant side effect of bone loss.

* Lifitegrast is a small-molecule integrin antagonist designed to treat dry eye has shown statistically significant improvement in both the signs and symptoms of dry eye. The investigational agent, lifitegrast, blocks the chronic inflammation mediated by T-cells that is central to many forms of dry eye disease. Lifitegrast is designed to immunomodulate a key pathway in the development and progression of dry eye. The inflammation associated with dry eye is largely mediated by T-cells which feature increased expression of intracellular adhesion molecule-1 (ICAM-1). Lifitegrast is an ICAM-1 decoy that blocks a key binding interaction between ICAM-1 and lymphocyte function- associated antigen-1 (LFA-1) expressed on the T cell surface. The blockade inhibits T-cell activation, adhesion, migration, proliferation and cytokine release in the eye, effectively down regulating inflammation and the resultant ocular surface disease.

* Lithospermate B or magnesium lithospermate B (MLB) is an hydrophilic active component of Salviae miltiorrhizae Radix that shows cardioprotective, neuroprotective and anti-inflammatory effects. Magnesium lithospermate B possesses inhibitory activity on Na +,K +-ATPase and neuroprotective effects against ischemic stroke. Lithospermate B has direct superoxide radicals scavenging and xanthine oxidase inhibitory activity. MLB was found to reverse both age- and UVB-related reductions in skin procollagen levels by suppressing the expressions and activities of NF-kB and AP-1-dependent MMPs by modulating ROS generation and the MAPK signaling pathway. Thus, MLB has potentially anti-wrinkle and anti-skin aging effects. Xantine oxidase inhibition reduces the production of uric acid, therefore indicated for the treatment of hyperuricemia and related medical conditions including gout. MLB also reduces renovascular hypertension by improving urinary electrolyte excretion and haemodynamics. Xanthine oxidase inhibitors are being investigated for management of reperfusion injury. MLB may also be a promising agent to prevent atherosclerosis and restenosis following angioplasty -an endovascular procedure to widen narrowed or

obstructed arteries or veins. MLB activates eNOS and ameliorates endothelial dysfunction in diabetes by enhancing vasodilation in addition to reducing oxidative stress. MLB has potential as a novel therapy for hepatic fibrosis. Hepatic fibrosis refers to a wound-healing response to various kinds of liver injuries caused by alcohol, hepatitis virus, and toxins.

* Masoprocol is an antineoplastic drug used to treat skin growths caused by sun exposure. A form of nordihydroguaiaretic acid that is being studied in the treatment of prostate cancer. Also called nordihydroguaiaretic acid, NDGA, and actinex. Nordihydroguaiaretic acid is an antioxidant, and it may block certain enzymes needed for tumor growth. It is a lipoxygenase inhibitor. A study on NDGA showed it increased male median lifespan by 8-10% at three different doses. Females did not show a lifespan benefit from NDGA, even at a dose that produced blood levels similar to those in males, which did show a strong lifespan benefit.

* Naringenin is a flavanone, a type of flavonoid, that is considered to have a bioactive effect on human health as antioxidant, free radical scavenger, anti-inflammatory, carbohydrate metabolism promoter, and immune system modulator. It is the predominant flavanone in grapefruit. Naringenin does have some ability to prevent carbohydrate absorption from the intestines, possibly reducing rapid rises in blood sugar and insulin after eating. Evidence suggests it might actually protect the liver from damage. Naringenin increases two important pharmaceutical targets, PPAR-alpha and PPAR-gamma, while blocking a third, LXR-alpha. The results are similar to those induced by long periods of fasting. This substance has also been shown to reduce oxidative damage to DNA in vitro. Naringenin could have some beneficial effect on weight management and metabolic syndrome (a combination of risk factors for obesity, type-2 diabetes, and heart disease that include insulin resistance, high blood pressure, low HDL cholesterol, high serum triglycerides and excess abdominal fat). Naringenin can interact with a number of pharmaceutical drugs, altering and influencing their blood levels. These include statins used for cholesterol control, calcium channel blockers used to treat high blood pressure, non-sedating antihistamines, anti-anxiety drugs, immunosuppressive drugs used to prevent rejection of transplanted tissues organs, and antiviral agents used to treat HIV/AIDS. The interaction effect is due to its inhibitory effect on the human cytochrome P450 isoform CYP1A2. Finally, naringenin has been found to successfully block the formation of kidney cysts, an effect that occurs in polycystic kidney disease, by regulating the PKD2 protein responsible for the condition.

* Oxaloacetate is an organic compound which takes part in several metabolic processes such as synthesis of amino acids and fatty acids, and also regulates mitochondrial and brain function. Among its other benefits (it is an antioxidant, brain function enhancer, and a modulator of certain age-related genes such as FOXO) it is also an effective mTOR modulator. It may also be considered as an mTOR mimetic which means that it has additional benefits which are similar to other mTOR inhibitors (such as modulation of apoptosis and reduction of glutamate) but that these benefits originate from mechanisms other than mTOR inhibition.

* Pralatrexate is an anti-cancer therapy for patients with relapsed or refractory peripheral T-cell lymphoma, or PTCL are a biologically diverse group of aggressive blood cancers that have a poor prognosis. Pralatrexate is an antifolate (a folate analogue metabolic inhibitor) designed to accumulate preferentially in cancer cells. Antifolates, such as pralatrexate, are part of a group of compounds known as antimetabolites with structural similarity to naturally occurring molecules involved in DNA synthesis. Cancer cells mistake antimetabolites for normal metabolites allowing the compound to stop or slow critical enzymes involved in DNA synthesis which then triggers cell death. Because of their primary effect on DNA synthesis, the antimetabolites are most effective against actively dividing cells and are largely cell-cycle phase specific. (Among the top most expensive meds - Folotyn)

* Progesterone is an endogenous steroid and progestogen sex hormone involved in the menstrual cycle, pregnancy, and embryogenesis of humans and other species. It belongs to a group of steroid hormones called the progestogens, and is the major progestogen in the body. Progesterone is also a crucial metabolic intermediate in the production of other endogenous steroids, including the sex hormones and the corticosteroids, and plays an important role in brain function as a neurosteroid. Elevated levels of progesterone potently reduce the sodium- retaining activity of aldosterone, resulting in natriuresis and a reduction in extracellular fluid volume. Progesterone withdrawal, on the other hand, is associated with a temporary increase in sodium retention (reduced natriuresis, with an increase in extracellular fluid volume) due to the compensatory increase in aldosterone production, which combats the blockade of the mineralocorticoid receptor by the previously elevated level of progesterone. Since most progesterone in males is created during testicular production of testosterone, and most in females by the ovaries, the shutting down (whether by natural or chemical means), or removal, of those inevitably causes a considerable reduction in progesterone levels. The tendency for progesterone to have a regulatory effect, the presence of progesterone receptors in many types of body tissue, and the pattern of deterioration (or tumor formation) in many of those increasing in later years when progesterone levels have dropped, is prompting widespread research into the potential value of maintaining progesterone levels in both males and females.

* R-lipoic acid, reduced lipoic acid or dihydrolipoic acid is the biologically active form of the mitochondrial antioxidant, alpha lipoic acid. R-lipoic acid is directly involved in cellular metabolism and is a vital component of the intracellular antioxidant cycle, able to scavenge a variety of free radicals and reactive oxygen species (ROS) while recycling vitamins C, E and glutathione. R-lipoic readily crosses the blood brain barrier and has been shown effective for elevating intracellular glutathione levels. R-LA helps regulate neuronal calcium homeostasis, regulates pro-inflammatory cytokines, and alters the expression of toxic genes. R-lipoic acid has been used to treat diabetes and has been recommended as a neuroprotective agent. R-LA enhances glucose uptake, inhibits glycosylation (where sugar abnormally attaches to protein) and helps skin's health and vitality. Dihydrolipoic acid may also be used to help energize the kidneys and neutralize toxins, including creatinine.

* RADA16 plus EE-3-SO4. RADA16 is a self-assembling peptide that can be used to establish nanofiber barriers that, when applied directly to a wound in the brain, spinal cord, femoral artery, liver, or skin of a mammal, could achieve complete hemostasis in less than 20s. This therapy stops bleeding without the use of pressure, cauterization, vasoconstriction, coagulation, or cross-linked adhesives. EE-3-SO4 is a drug derived from the female hormone estrogen that may help patients with severe bleeding survive long enough to get to appropriate medical care. It is extremely effective in improving cardiovascular functions and boosting survival rates following injuries with extreme hemorrhage.

* Rilonacept, also known as IL-1 Trap is an interleukin 1 inhibitor. Rilonacept is a dimeric fusion protein consisting of the ligand-binding domains of the extracellular portions of the human interleukin-1 receptor component (IL-1R1) and IL-1 receptor accessory protein (IL-1RAcP) linked in-line to the fragment- crystallizable portion (Fc region) of human IgG1 that binds and neutralizes IL-1. Rilonacept is used for the treatment of cryopyrin-associated periodic syndromes (CAPS), including familial cold autoinflammatory syndrome, Muckle-Wells syndrome and neonatal onset multisystem inflammatory disease. (Among the top most expensive meds - Arcalyst)

* SERPING1 factor or C1-inhibitor (C1-inh, C1 esterase inhibitor) is a protease inhibitor belonging to the serpin superfamily. Its main function is the inhibition of the complement system to prevent spontaneous activation. Deficiency of this protein is associated with hereditary angioedema ("hereditary angioneurotic edema"), or swelling due to leakage of fluid from blood vessels into connective tissue. Deficiency of C1-inhibitor permits plasma kallikrein activation, which leads to the production of the vasoactive peptide bradykinin. Also, C4 and C2 cleavage goes unchecked, resulting in auto-activation of the complement system. In its most common form, it presents as marked swelling of the face, mouth and/or airway that occurs spontaneously or to minimal triggers (such as mild trauma), but such swelling can occur in any part of the body. In 85% of the cases, the levels of C1-inhibitor are low, while in 15% the protein circulates in normal amounts but it is dysfunctional. In addition to the episodes of facial swelling and/or abdominal pain, it also predisposes to autoimmune diseases, most markedly lupus erythematosus, due to its consumptive effect on complement factors 3 and 4. Mutations in the gene that codes for C1-inhibitor, SERPING1, may also play a role in the development of age related macular degeneration. (Among the top most expensive meds - Cinryze)

* Silmitasertib or CX-4945 is an inhibitor of CK2 (casein kinase 2) which appears to be responsible for preventing white fat from burning energy for heat in cold conditions. In a recent study, when researchers inhibited the activity of this molecule genetically or pharmacologically, white fat cells lit up their cellular furnaces, becoming calorie burners like their brown and beige brethren. Silmitasertib (CX-4945), which is already in clinical trials as a cancer therapeutic, succeeded in turning significant amounts of white fat brown and significantly increasing the amount of energy mice burned when researchers turned down the temperature in their living quarters. The drug also significantly reduced the negative effects of a high-fat diet in mice, including reducing weight gain and, to the researchers' surprise, significantly lowering blood glucose levels and improving

responsiveness to insulin.

* Sirolimus (also known as rapamycin) is a chemical that is a product of bacteria discovered on Easter Island (the island is also known as Rapa Nui). Sirolimus was originally developed as an antifungal agent. However, this use was abandoned when it was discovered to have potent immunosuppressive and antiproliferative properties. It has since been shown to prolong the life of mice and might also be useful in the treatment of certain cancers. Unlike the similarly named tacrolimus, sirolimus is not a calcineurin inhibitor, but it has a similar suppressive effect on the immune system. Sirolimus inhibits IL-2 and other cytokines receptor-dependent signal transduction mechanisms, via action on mTOR, and thereby blocks activation of T and B cells. The chief advantage sirolimus has over calcineurin inhibitors is its low toxicity toward kidneys. Transplant patients maintained on calcineurin inhibitors long-term tend to develop impaired kidney function or even chronic renal failure; this can be avoided by using sirolimus instead. The antiproliferative effect of sirolimus has also been used in conjunction with coronary stents to prevent restenosis in coronary arteries following balloon angioplasty. Because rapamycin at high doses can suppress the immune system, people taking rapamycin for transplant or cancer therapy are more susceptible to dangerous infections. Yet paradoxically, rapamycin was shown to enhance the ability of aging mice to mount an immune response to a vaccine against tuberculosis. A similar immunological "rejuvenating" effect was later documented in elderly humans administered a rapamycin analog prior to influenza vaccination), further fueling optimism for the potential of mTOR as a target for anti-aging drugs for humans. Agents such as rapamycin work by improving signalling between the cells. An example of these pathways is the regulation of the Growth Hormone/insulin/IGF-1 pathway, inactivation of which has been shown to increase lifespan in the laboratory.

* Staph aureus SSL7 or superantigen-like 7 is a secreted protein in staphylococcus aureus that specifically binds to human C5 and thereby prevents C5 activation into C5b and C5a in vitro. Bacterial molecules like SSL7 are key to counteract the detrimental effects of complement activation in inflammatory disease states. (Among the top most expensive meds - Soliris)

* VEGF165 is the most abundant splice variant of VEGF-A. VEGF165 is a glycoconjugate produced by a number of cells including endothelial cells, macrophages and T cells. VEGF165 is involved in angiogenesis, vascular endothelial cell survival, growth, migration and vascular permeability. VEGF gene expression is induced by hypoxia, inflammatory cytokines and oncogenes. VEGF165 binds to heparan sulfate and is retained on the cell surface and in the extracellular matrix. VEGF165 binds to the receptor tyrosine kinases, VEGFR1 and VEGFR2. VEGF165 is the only splice variant that binds to co-receptors NRP-1 and NRP-2 that function to enhance VEGFR2 signaling. Binding of VEGF165 to VEGFR1 and VEGFR2 leads to activation of the PI3K/AKT, p38 MAPK, FAK and paxillin. VEGF plays a key role in tumor angiogenesis in many cancers. Glycoconjugates like VEGF165 related to peripheral arterial disease PAD and critical limb ischemia CLI may be a good strategy for their prevention and treatment.

1.3.1.25 RT-MB-22

https://archive.org/details/Resonant_Therapy-Molecular_Biology_22

ABCD1 Factor, AM-679, AR-42, Asteromycin, BAY 73-6691, Bacillus Licheniformis-NuB Factor, CEP290 Factor, CHM Factor, FL118, G-CSF Factor, HBB Factor, HU-211, IRX-4204, Indanomycin, J-147, LCA-5 Factor, LPL Factor, Methylene Blue, MT-ND4 Factor, Naphazoline Nitrate, PHA-543613, RPE65 Factor, SB-366791, SERCA2A Factor, SR-2211, Sox4-Sox11 Factors, Stampidine, Streptomyces L74-Cyclamin, Triptolide, Yohimbine

* ABCD1 factor is a protein that transfers fatty acids into peroxisomes. Defects in this gene have been identified as the underlying cause of adrenoleukodystrophy, an X-chromosome recessively inherited demyelinating disorder of the nervous system.

* AM-679 is a drug which acts as a selective inhibitor of 5-Lipoxygenase- activating protein (FLAP). This protein is involved in the production of cysteinyl leukotrienes which are involved in inflammation, and AM-679 has anti-inflammatory effects in animal studies. Respiratory syncytial virus (RSV) is an important cause of viral respiratory disease in children, and RSV bronchiolitis has been associated with the development of asthma in childhood. RSV spreads from the eye and nose to the human respiratory tract. Correlative studies of humans and direct infection studies of BALB/c mice have established the eye as a significant pathway of entry of RSV to the lung. At the same time, RSV infection of the eye produces symptoms resembling allergic conjunctivitis. In a BALB/c mouse eye RSV infection model AM679 markedly reduced the RSV-driven ocular pathology as well as the synthesis of CysLTs in the eye. In addition, AM679 decreased the production of the Th2 cell cytokine interleukin-4 but did not increase the viral load in the eye or the lung. These results suggest that FLAP inhibitors may be therapeutic for RSV-driven eye disease and possibly other inflammatory eye indications.

* AR-42 is part of a class of drugs known as HDAC (histone deacetylase) inhibitors, which are designed to block proteins that play a key role in mediating skeletal muscle breakdown. In cancer, HDAC proteins also tend to drive the pathways in cancer cells that lead to aggressive cancers. AR-42 is unique among HDAC inhibitors because it appears to have beneficial effects on muscle health and function. In cancer patients AR-42 can significantly preserve body weight and prolong survival while simultaneously preventing the loss of muscle and fat tissue mass and preserving the health/strength of muscle. Most advanced cancer patients will experience significant loss of muscle mass as the result of their cancer at some point during their treatment, a condition clinically known as "cachexia." The condition is most common in pancreas and gastrointestinal cancers, with up to 70 to 80 percent of patients experiencing severe loss of muscle mass that impacts their ability to tolerate necessary treatments. Ar-42 is also used as a treatment of meningioma and schwannoma of the central nervous system. Meningioma and schwannoma are benign tumors that can present in different locations within the

brain and the spinal cord and may cause substantial morbidity for those affected individuals. AR-42 has been found to modulate several apoptosis inhibitors as well as cell survival regulator, including Akt, Bcl-xL, Bax, Ku70 and surviving, and exert potent antitumor activity against multiple tumor types, such as human prostate and hepatic cancers, at least partially through PI3K/Akt pathway inhibition. AR-42 not only decreases the severity of prostatic intraepithelial neoplasia (PIN) and completely prevents its progression to poorly differentiated carcinoma, but also shifts tumorigenesis to a more differentiated phenotype, suppressing absolute and relative urogenital tract weights. AR-42 significantly reduces leukocyte counts, and prolongs survival in three separate mouse models of B-cell malignancy without evidence of toxicity. AR-42 has also shown greater potency and activity in solid tumors and hematological malignancies when compared to vorinostat.

* Asteromycin is a compound found in some Actinobacteria of the genus Streptomyces with antimycoplasma, antibiotic, acaricidal, antitumor, antibacterial, anthelmintic, and antiviral activity.

* BAY 73-6691 is a drug developed for the treatment of Alzheimer's disease. It was the first compound developed that acts as a phosphodiesterase inhibitor selective for the PDE9A subtype. The PDE9A enzyme is expressed primarily in the brain, with high concentrations in the cerebellum, neocortex, striatum, and hippocampus, and acts to limit the cGMP-mediated signal transduction which occurs following glutamate binding to NMDA receptors. Consequently selective PDE9A inhibitors were predicted to prolong intracellular responses to glutamate and enhance glutamate signalling, and since this process is known to be involved in learning and memory, PDE9A inhibitors should have a nootropic effect and may be useful in the treatment of Alzheimer's.

* Bacillus licheniformis NucB is effective against the biofilm that chronic sinusitis bacteria form, a slimy protective barrier which can protect them from sprays or antibiotics. Sinusitis symptoms include a blocked nose, nasal discharge or congestion, recurrent headaches, loss of the sense of smell and facial pain. When under threat, bacteria shield themselves in a slimy protective barrier. This slimy layer, known as a biofilm, is made up of bacteria held together by a web of extracellular DNA which adheres the bacteria to each other and to a solid surface -in this case in the lining of the sinuses. The biofilm protects the bacteria from attack by antibiotics and makes it very difficult to clear them from the sinuses. When Bacillus licheniformis want to move on, they release an enzyme which breaks down the external DNA, breaking up the biofilm and releasing the bacteria from the web. The enzyme NucB when added to other biofilms it quickly dissolved the slime exposing the bacterial cells, leaving them vulnerable.

* CEP290 factor, centrosomal protein of 290 kDa plays an important role in centrosome and cilia development. This gene is vital in the formation of the primary cilium, a small antenna-like projections of the cell membrane that plays an important role in the photoreceptors at the back of the retina (which detect light and color) and in the kidney, brain, and many other organs of the body. The discovery of the CEP290 gene has led

researchers to find another gene critical in retinal function, LCA5. Clinical trials involving gene replacement of these two genes have started in Philadelphia, where researchers are hopeful that Leber Congenital Amaurosis will one day be cured. Mutations in this gene have been associated with Joubert syndrome and nephronophthisis, and recently with a frequent form of Leber's Congenital Amaurosis, called LCA10. The presence of antibodies against this protein is associated with several forms of cancer.

* CHM factor encodes rab escort protein 1 also known as rab proteins geranylgeranyltransferase component A 1. Mutations in this gene are a cause of choroideremia; also known as tapetochoroidal dystrophy (TCD). This X-linked disease is characterized by progressive dystrophy of the choroid, retinal pigment epithelium and retina.

* FL118 is a novel camptothecin analogue that overcomes irinotecan and topotecan resistance in human tumor xenograft models. Camptothecin, a cytotoxic quinoline alkaloid, was first isolated from the bark of a tree used in traditional Chinese medicine and identified as a powerful anticancer agent. Currently the known mechanism of action for camptothecin compounds is the ability to inhibit DNA topoisomerase 1 (Top1) activity, which thereby induces DNA damage and cancer cell death due to the inability of cells to complete DNA replication. However, two camptothecin analog compounds, irinotecan and topotecan are associated with significant shortcomings. FL118 is capable of eliminating colon and head-and-neck tumor xenografts at its maximum tolerated dose (MTD), and even at sub-MTD levels a high percentage of human xenograft tumors can be eliminated. FL118 selectively inhibits the expression of multiple antiapoptotic proteins (survivin, Mcl-1, XIAP and cIAP2) from the inhibitor of apoptosis (IAP) and Bcl-2 families, and effectively inhibits cancer cell growth regardless of p53 status (wild type, mutant or null). Intriguingly, cancer cells with null or mutated p53 are more sensitive to FL118 treatment than cancer cells with wild type p53, implying that FL118 may be more effective in treatment of advanced cancers that lose wild type p53. FL118 appears to bypass multiple efflux pump protein-induced resistance, which may contribute to FL118 overcoming irinotecan and topotecan resistance in vivo. Mechanistically, FL118 not only inhibits the expression of survivin, Mcl-1, XIAP, cIAP2 and HdmX/Hdm4, but also at least bypasses ABCG2 and P-pg/MDR1 resistance and possible other efflux pump protein-induced drug resistance, which explains the favorable toxicity and PK profile of FL118. The compound rapidly cleared in blood circulation while accumulated in xenograft tumors.

* G-CSF or granulocyte-colony stimulating factor is a glycoprotein that stimulates the bone marrow to produce granulocytes and stem cells and release them into the bloodstream. Functionally, it is a cytokine and hormone, a type of colony-stimulating factor, and is produced by a number of different tissues. G-CSF also stimulates the survival, proliferation, differentiation, and function of neutrophil precursors and mature neutrophils. G-CSF factor expression may lead to significant reduction in deaths, cerebral atrophy, and neurological deficits following ischemia. G-CSF holds a promise as a potential treatment for brain disorders including stroke, Alzheimer's, Parkinson's, and amyotrophic lateral sclerosis. G-CSF when given early after exposure to radiation

may improve white blood cell counts, and is stockpiled for use in radiation incidents. G-CSF is used with certain cancer patients to accelerate recovery from neutropenia after chemotherapy. G-CSF is also used to increase the number of hematopoietic stem cells in donor's blood, and may also be given to the receiver in hematopoietic stem cell transplantation.

* HBB factor, beta globin (also referred to as, hemoglobin beta, or preferably haemoglobin subunit beta) is a globin protein, which along with alpha globin (HBA), makes up the most common form of haemoglobin in adult humans. HBB is involved in oxygen transport from the lung to the various peripheral tissues. Mutations in the gene produce several variants of the proteins which are implicated with genetic disorders such as sickle-cell disease, Heinz body anemias, and beta thalassemia, as well as beneficial traits such as genetic resistance to malaria.

* HU-211 is a synthetic terpene-based cannabinoid devoid of central cannabinoid (CB1) and peripheral cannabinoid (CB2) agonist activity, thus lacking the psychomotor responses characteristic of delta9-THC. HU-211 does exhibit the neuroprotective, antioxidant properties of other related compounds like cannabidiol. HU-211 also has anti-inflammatory properties derived through inhibition of NF-kappaB and the resulting decreases in cytokines such as TNFalfa and interleukin-6.

* IRX-4204 is a retinoid X receptor (RXR) agonist with potential antineoplastic and anti-inflammatory activities. IRX4204 attenuates AD and prevents plaque deposits associated with cognitive deterioration. IRX4204 also prevents neuropathological features associated with abnormal tau processing, another form of abnormal protein also found in a form of Parkinson's disease associated with dementia. Because RXRs can form heterodimers with several nuclear receptors (NRs), IRX4204 activation of RXR may result in a broad range of gene expression depending on the effector DNA response elements activated. Rexinoid IRX4204 may inhibit the tumor-necrosis factor (TNF)-mediated release of nitric oxide (NO) and interleukin 6 (IL6) and may inhibit tumor cell proliferation. This agent appears to be less toxic than RAR-selective ligands.

* Indanomycin from Streptomyces antibioticus is an active compound against Gram positive bacteria and insects. Indanomycin is antibiotic, antibacterial antiprotozoal, insecticidal and ionophore -binds ions reversibly. Indanomycin posseses affinity for both mono- and divalent ions and has been reported as a growth promotor in ruminants. Besides being an antibiotic agent, indanomycin attacks tumours and reduces hypertension.

* J-147 was discovered based upon efficacy in multiple cell culture models of age-associated pathologies rather than exclusively amyloid metabolism. It is an exceptionally potent, orally active and broadly neuroprotective compound with the ability to enhance memory in normal animals as well as to prevent memory deficits in Alzheimer’s disease (AD) transgenic mice. The neurotrophic and memory-enhancing activities of J147 are associated with an increase in brain derived neurotrophic factor (BDNF) levels and the expression of BDNF responsive proteins, the enhancement of

LTP, the preservation of synaptic protein, the reduction of amyloid plaques, etc. Other effects noted by researchers are increased energy metabolism, reduced brain inflammation, reduced levels of oxidized fatty acids in the brain, and preventing the leakage of blood from the microvessels in the brain.

* LCA5 factor lebercilin, also known as leber congenital amaurosis 5, is a protein that in humans is encoded by the LCA5 gene. This protein is thought to be involved in centrosomal or ciliary functions. Mutations in the LCA5 gene are associated with Leber's congenital amaurosis.

* Lipoprotein lipase (LPL) is a member of the lipase gene family, which includes pancreatic lipase, hepatic lipase, and endothelial lipase. LPL encodes lipoprotein lipase, which is expressed on endothelial cells in the heart, muscle, and adipose tissue. The primary function of this lipase is the hydrolysis of triglycerides of circulating chylomicrons and very low density lipoproteins (VLDL). Binding to heparin sulfate proteogylcans at the cell surface is vital to the function. The apolipoprotein, APOC2, acts as a coactivator of LPL activity in the presence of lipids on the luminal surface of vascular endothelium (By similarity). Severe mutations that cause LPL deficiency result in type I hyperlipoproteinemia, while less extreme mutations in LPL are linked to many disorders of lipoprotein metabolism. Lipoprotein lipase deficiency leads to hypertriglyceridemia (elevated levels of triglycerides in the bloodstream). In mice, overexpression of LPL has been shown to affect insulin response and to promote obesity. (Most expensive med in the world - Glybera)

* Methylene blue is often used as a treatment for urinary tract infections and other mild infections in conjunction with other treatments. Additionally, the compound can be used to treat malaria, cancer, skin conditions including psoriasis, Alzheimer’s disease, and cyanide as well as carbon monoxide poisoning. It is also used as a treatment for parasites, swine flu, and Parkinson’s disease.

* MT-ND4 or NADH-ubiquinone oxidoreductase chain 4 factor variations' are associated with age-related macular degeneration (AMD), Leber's hereditary optic neuropathy (LHON), mesial temporal lobe epilepsy (MTLE) and cystic fibrosis. Leber hereditary optic neuropathy's early symptoms include blurry vison and usually appear during the teens or early twenties. Eyesight tends to worsen over time, eventually leading to a severe loss of sharpness (acuity) and color vision. These problems are caused by a loss of retinal ganglion cells -the cells that carry visual signals from the retina through the optic nerve and into the brain.

* Naphazoline nitrate is a rapid acting sympathomimetic vasoconstrictor of occular artierioles. It acts to decrease congestion of the conjunctiva and is found in many over-the-counter eye drops. Naphazoline is primarily indicated in conditions like corneal vascularity, hyperaemia, itching, nasal congestion, and can also be given in adjunctive therapy as an alternative drug of choice in sinusitis. It is a sympathomimetic agent with marked alpha adrenergic activity. It is a vasoconstrictor with a rapid action in reducing swelling to mucous membranes. It acts on alpha-receptors in the arterioles of the

conjunctiva to produce constriction, resulting in decreased congestion.

* PHA-543613 is a drug that acts as a potent and selective agonist for the alfa7 subtype of neural nicotinic acetylcholine receptors, with a high level of brain penetration and good oral bioavailability. It is under development as a possible treatment for cognitive deficits in schizophrenia.

* RPE65 factor encodes the retinal pigment epithelium-specific 65 kDa protein. The retinal pigment epithelium-specific 65 kDa protein is located in the retinal pigment epithelium and is involved in the conversion of all-trans retinol to 11-cis retinal during phototransduction, which is then used in visual pigment regeneration in photoreceptor cells. Mutations in this gene have been associated with Leber's congenital amaurosis type 2 (LCA2) and retinitis pigmentosa.

* SB-366791 is a potent, selective and competitive vanilloid TRPV1 receptor antagonist; antagonizes hTRPV1 receptors activated by agonists, noxious heat, but not protons. Displays selectivity over a wide range of receptors and systems including CB1 and CB2 receptors, voltage-gated Ca2+ channels and the hyperpolarization-activated current. In humans, drugs acting at TRPV1 receptors could be used to treat neuropathic pain associated with multiple sclerosis, chemotherapy, or amputation, as well as pain associated with the inflammatory response of damaged tissue, such as in osteoarthritis. Other use could be as a pepper spray antidote. SB-366791 attenuates thermal hyperalgesia and mechanical allodynia (pain from stimuli not normally painful) without affecting mechanical hyperalgesia following surgical incision. TRPV1 blockade increases body temperature in multiple species, including rodents and humans, suggesting that TRPV1 is involved in body temperature maintenance. SB366791, does not block the precise mechanism involved in temperature adaptation.

* SERCA2A or ATP2A2 sarcoplasmic/endoplasmic reticulum calcium ATPase 2 is a magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Normal function of the heart involves proper coordination between the contraction and relaxation of cardiomyocytes. Proper contraction and relaxation depends on the coordinated rise and fall of Ca2+ in the cytosol of the cardiomyocytes. The SERCA2a transporter is found in the membrane of the SR and plays an important role in this cycle by removing cytosolic Ca2+ from the cardiomyocyte and pumping it back into the SR during relaxation of the heart (diastole). SERCA2a restores SR Ca2+ for the next contraction of ardiomyocytes. SERCA2a activity declines in patients experiencing late-stage heart failure. This leads to an above normal amount of cytosolic Ca2+ in the cardiomyocytes during diastole. It also results in less Ca2+ remaining in the SR for the next contraction of the heart. The altered cycling of Ca2+ in cardiomyocytes ultimately leads to improper functioning of the heart.

* SR-2211 works directly and specifically on at least two immune cell types directly involved in the pathogenesis of autoimmune disease. The experimental compound targets the nuclear receptor RORgamma, a key regulator of TH17 cells, one of a family

of white blood cells that play a role in the immune system. Identified only a decade ago, TH17 cells have been implicated in numerous autoimmune diseases, including multiple sclerosis, rheumatoid arthritis, inflammatory bowel disease and lupus. SR2211, blocked development of virtually all symptoms of rheumatoid arthritis in mice within the first eight to ten days of treatment. The mice also showed significantly reduced bone and cartilage erosion compared to animals that did not receive treatment.

* Sox4 and Sox11 factors play a role in shaping the identity cells assume by regulating the expression of other genes. Loud noise, trauma, infections, plain old aging--many things can destroy hair cells, the delicate sensors of balance and sound within the inner ear. And once these sensors are gone, that's it; the delicate hair cells don't grow back in humans, leading to hearing loss and problems with balance. In a recent study, when both genes were shut down, the entire inner ear, not just the utricle, developed abnormally. In other experiments, turning on the genes in older mice whose hair cells were fully matured, the activation of these genes induced the production of new hair cells within a fully developed utricle. These genes, or others in the same pathway, could be promising targets for efforts to treat hearing loss or balance problems by regenerating hair cells, researchers suggest.

* Stampidine is an experimental nucleoside reverse transcriptase inhibitor (NRTI) with anti-HIV activity. Stampidine displays remarkable in vitro and in vivo anti-HIV activity against drug-sensitive and drug-resistant HIV strains. Stampidine is non-cytotoxic and nonirritating to mucosal epithelial cells. Several preclinical studies conducted thus far, suggest that stampidine has clinical potential as a dual-function topical agent for the prevention and/or effective treatment of oculo-genital ADV/HIV infections. Adenoviruses (ADVs) are causative agents of severe and extremely contagious ocular and genital infections associated with conjunctivitis, genital ulcers and urethritis.

* Streptomyces L74-Cyclamin (saponin) is an algicide compound from Triterpenoid saponin is a type of saponin found in many plants. These compounds exhibit antimicrobial, antibacterial, antifungal, antiviral, antiyeast, and cytotoxic activities. In contrast to the structures of known triterpenoid saponins, this triterpenoid saponin may be a new type of saponin from actinobacteria. Streptomyces L74 shows two patterns of algicidal activities against M. aeruginosa, A. flos-aquae, O. animalis, and Aph. flos-aquae. Streptomyces L74 indirectly attacks M. aeruginosa, O. animalis, and Aph. flos-aquae by using the active substances. Streptomyces L74 directly attacks A. flos-aquae by cell-to-cell contact. This species also exhibits high algicidal activities against other harmful types of cyanobacteria. Eutrophic fresh water cyanobacteria produce neurotoxins and peptide hepatotoxins, such as microcystin and cyanopeptolin. The growth of cyanobacterial harmful algal blooms (cyanoHABs) has become a global concern as they threaten the environment, economy, and human health and require treatment to control pollution.

* Triptolide is a diterpenoid triepoxide found in the Thunder God Vine, Tripterygium wilfordii. It has in vitro and in vivo activities against mouse models of polycystic kidney disease and pancreatic cancer. It is used in traditional Chinese medicine for treatment

of fever, chills, edema and carbuncle. Triptolide has multiple pharmacological activities including anti-inflammatory, immune modulation, antiproliferative and proapoptotic activity. It is also under investigation for its apparent antifertility effects, which it is speculated, may provide a basis for a male oral contraceptive. The mechanism by which they affect fertility is not yet understood. What is known is that daily doses of these compounds reduce sperm counts and also severely affect the formation and maturation of sperm, causing them to be immotile, while stopping treatment reverses the process.

* Yohimbine is a chemical derived from the bark of the yohimbe tree, a tall evergreen native to Western Africa. Yohimbine is a common ingredient in energy drinks and sports nutrition supplements. It is a vasodilator, which means that it expands blood vessels. This allows for easier blood flow and superior circulation. In particular, studies have shown that yohimbine is effective in improving blood flow to extremities. Lower doses of yohimbine can also lower blood pressure and increase heart rate, which can help your body deliver nutrients to working cells. Yohimbine is also a popular ingredient in weight-loss and fat-burning products. This is because some studies have shown yohimbine to be effective in removing "stubborn fat" -slimming down problem spots like the abdomen and thighs. Yohimbine's slimming effect is due to its blockage of alpha2 andrenoreceptors, which prevent the release of a fat-mobilizing hormone, norepinephrine. Yohimbine ensures higher norepinephrine levels, which causes the body to break down fat cells. This also increases blood flow to fat tissue, which causes less fat to be retained. Yohimbine reduces carbohydrate and fat intake, but not protein intake. This assists in appetite suppression because protein increases feelings of fullness. The body also burns more calories digesting protein than it does digesting carbohydrates or fat. Supplements that promise to optimize sexual health and battle erectile dysfunction also contain yohimbine. This is because of yohimbine's tendency to increase blood flow to extremities -in this case, the genitals. In addition, yohimbine can slightly increase testosterone levels in men. Women can benefit from yohimbine as well, as the chemical can increase feelings of sexual arousal.

1.3.1.26 RT-MB-23

https://archive.org/details/Resonant_Therapy-Molecular_Biology_23

1400W Dihydrochloride, Allantoin-Trichostatin A-Sirolimus-LY294002, Bimagrumab, Buthus Martensii LVP1a Factor, CYP3A4 Factor, Calcitriol, Catechin, DEETGE Calpain TAT, DRL-17822, Desmopressin Peptide, Enzymatic Wound Cleaner, Flumazenil, Graying Hair, IZUMO1 Factor-YLP12 Peptide, Ibudilast, Iptakalim, Mebendazole, Michondrial Complex II, NR3C1 Factor, Nerve Strength, Niacin, PF-04991532, PRG4 Factor, Pseudomonas NicA2 Factor, RQ-00000010, Setipiprant, Taurine, Vitamin C Forms, Vitamins A-B3-C-D, Zucapsaicin,

* 1400W Dihydrochloride is an inhibitor of inducible nitric oxide synthase, it may help

with innate defects of the immune system in the lung wich affect NO homeostasis. iNOS expression is induced by inflammatory stimuli and is associated with both normal and pathological immune responses. The chief cause of COPD is inhalation of smoke from tobacco and cooking fires and of air pollutants from automotive and industrial activities. Prominent forms of the disease include chronic bronchitis (i.e., inflammation of the larger airways) and emphysema (i.e., destruction of the alveoli, or air sacs). Increased production of iNOS in the cilia of the lungs, due to repeated injury, is positively related to a decrease of the cleansing motions provided by intact cilia. In other words, upregulated iNOS is part of the process by which the smoke exposure causes emphysema and pulmonary hypertension. iNOS inhibition may reverse lung structural damage and function.

* Allantoin, trichostatin A, sirolimus and LY-294002. A mix of compounds that may extended lifespan in a way expected from calorie restriction, and help to stay healthier longer, according to research. Allantoin is frequently present in cosmetic and pharmaceutical products. Further molecular analysis of allantoin suggests it acts by a different mechanism from rapamycin (sirolimus), a well-known longevity drug. Trichostatin A is an organic compound that serves as an antifungal antibiotic and selectively inhibits the class I and II mammalian histone deacetylase (HDAC) families of enzymes, but not class III HDACs (i.e., Sirtuins). TSA inhibits the eukaryotic cell cycle during the beginning of the growth stage. TSA can be used to alter gene expression by interfering with the removal of acetyl groups from histones (histone deacetylases, HDAC) and therefore altering the ability of DNA transcription factors to access the DNA molecules inside chromatin. It is a member of a larger class of histone deacetylase inhibitors (HDIs or HDACIs) that have a broad spectrum of epigenetic activities. Sirolimus is a macrolide antibiotic with immunosuppressant properties used to prevent organ rejection. Sirolimus inhibits early activation and proliferation of T lymphocytes and inhibits cell cycle progression at a later stage. It was used as a kind of original antifungal antibiotic. LY294002 is a morpholine-containing chemical compound that is a potent inhibitor of numerous proteins, and a strong inhibitor of phosphoinositide 3-kinases (PI3Ks). LY294002 causes a substantial acceleration of MEPP frequency at the neuromuscular junction through a perturbation of synaptotagmin function.

* Bimagrumab (BYM338) is a human monoclonal antibody to treat pathological muscle loss and weakness. Bimagrumab binds with high affinity to type II activin receptors, preventing natural ligands from binding, including myostatin and activin. Bimagrumab stimulates muscle growth by blocking signaling from these inhibitory molecules. In addition, bimagrumab is in clinical development for chronic obstructive pulmonary disease (COPD), cancer cachexia, sarcopenia and in mechanically ventilated patients.

* Buthus Martensii Lipolysis activating factor 1 alpha (LVP1-a) from scorpion venom activates lipolysis (literally the burning of fat).

* CYP3A4 or cytochrome P450 3A4, is an important enzyme in the body, mainly found in the liver and in the intestine. Its purpose is to oxidize small foreign organic molecules (xenobiotics), such as toxins or drugs, so that they can be removed from the body.

While many drugs are deactivated by CYP3A4, there are also some drugs which are activated by the enzyme. Some substances, such as grapefruit juice and some drugs, interfere with the action of CYP3A4. These substances will therefore either amplify or weaken the action of those drugs that are modified by CYP3A4.

* Calcitriol is prescribed for treatment of hypocalcaemia – hypoparathyroidism, osteomalacia (adults), rickets (infants, children), renal osteodystrophy, chronic kidney disease, treatment of osteoporosis, prevention of corticosteroid-induced osteoporosis. Calcitriol is also administered for the treatment of psoriasis and psoriatic arthritis. Calcitriol is the hormonally active metabolite of vitamin D. Calcitriol increases the level of calcium (Ca2+) in the blood by increasing the uptake of calcium from the gut into the blood, and possibly increasing the release of calcium into the blood from bone.

* Catechin is a type of phytochemical which controls the harmful substances caused due to smoking and scavenger of indoor air pollutants.

* The peptide is DEETGE-CAL-Tat and the bottom line is to make more of the transcription factor Nrf2 available to ailing neurons. Typically, Nrf2 remains inactive in the cell cytoplasm, bound to a protein called Keap1, until some major stress, such as ischemia occurs. At that time, some Nrf2 is released to move to the cell nucleus, where it turns on a host of antioxidant and otherwise cell-protective and detoxification genes. Brain cell damage and death can occur over hours and days, and oxidative stress alone can make cells dysfunctional. This Nrf2-freeing peptide has benefit up to two days after the insult. An amino acid sequence in Nrf2 called DEETGE is what actually attracts Keap1. MCG scientists took advantage of this natural attraction by putting DEETGE in their peptide as some friendly competition. To ensure that the peptide only works in response to injury, they packaged DEETGE with calpain, an enzyme that can cut proteins and is activated by the calcium released after injury. To help ensure the peptide reached its definition, they added Tat, a protein that enables viruses, such as HIV, to be so skillful at invading a cell. Calpain has the additional important job of cutting Tat loose, once the peptide is inside the cell, because the transportation aid has now become a liability that can actually interfere with the peptide's ultimate job of binding to Keap1. The injury-specificity of their peptide afforded by calpain also reduces unintended consequences.

* DRL-17822 - 603.603 a benzylamine derivative CETP inhibitor (dyslipidemia/atherosclerosis/cardiovascular diseases), for treatment of atherosclerosis therapy lipoprotein disorder. Is a selective inhibitor of cholesteryl ester transfer protein (CETP). Cardiovascular disease is a leading cause of death worldwide. Among cardiovascular disorders, coronary heart disease (CHD) caused by atherosclerosis is the most common cause of morbidity and mortality. Prevention, stabilization and regression of atherosclerotic plaques may have a major impact on reducing the risk of acute coronary events. Cholesteryl ester transfer protein (CETP) inhibitors are being explored for their ability to elevate HDL-C. Hyperlipidemia or an elevation in serum lipids is associated with an increase incidence of cardiovascular disease and atherosclerosis. Primary hyperlipidemia is a term used to describe a defect in lipoprotein metabolism.

The lipoproteins commonly affected are low density lipoprotein (LDL) cholesterol, which transports mainly cholesterol, and very low density lipoprotein-cholesterol (VLDL-cholesterol), which transports mainly triglycerides (TG). Most subjects with hyperlipidemia have a defect in LDL metabolism, characterized by raised cholesterol, LDL-C levels, with or without raised triglyceride levels; such subjects are termed hypercholesterolemic (Fredrickson Type II).

* Desmopressin is a synthetic replacement for vasopressin, the hormone that reduces urine production. It may be taken nasally, intravenously, or as an oral or sublingual tablet. Physicians prescribe desmopressin most frequently for treatment of diabetes insipidus, bedwetting, or nocturia. Some patients using desmopressin might be at risk of developing hyponatremia, an imbalance of the body's sodium levels. Desmopressin (DDAVP) stimulates the release of von Willebrand factor (vWF) from the Weibel–Palade bodies of endothelial cells, thereby increasing the levels of vWF (as well as coagulant factor VIII) 3 to 5-fold. Desmopressin can be used to promote the release of von Willebrand factor (with subsequent increase in factor VIII survival secondary to vWF complexing) in patients with coagulation disorders such as von Willebrand disease, mild hemophilia A (factor VIII deficiency), and thrombocytopenia. It can be used with uremic induced platelet dysfunction. It is not effective in the treatment of hemophilia B (factor IX deficiency) or severe hemophilia A. Desmopressin is used in the treatment of central diabetes insipidus (DI), to replace endogenous antidiuretic hormone Vasopressin (ADH) that is missing in the central nervous system type of this disorder (decreased production of ADH from the posterior pituitary). It is also used in the diagnostic workup for diabetes insipidus, in order to distinguish central from nephrogenic DI Desmopressin works by limiting the amount of water that is eliminated in the urine. Desmopressin is degraded more slowly than recombinant vasopressin, and requires less frequent administration. In addition, it has little effect on blood pressure, while vasopressin may cause arterial hypertension. Vasopressin stimulates the release of ACTH, which indirectly increases responsiveness of alpha-1 receptor in blood vessel smooth muscle, increasing vessel tone and blood pressure. Several studies has shown that Desmopressin does not stimulate ACTH release (except in Cushing's Disease), and therefore does not directly raise blood pressure, however, one study showed that it stimulates ACTH release in over 50% of healthy subjects. Additionally, desmopressin is able to enhance ACTH and cortisol release in normal subjects following oCRH administration, but not in patients with anorexia nervosa.

* Enzymatic wound cleaner is a mix of Fibrinolysin and Bacillus cereus AlkD factor. Fibrinolysin, an enzyme, attacks and inactivates fibrin molecules occurring in undesirable exudates on the surface of the human body and on human mucosa, e.g., in superficial wounds and burns. It is used in enzymatic wound cleaning to assist healing of minor burns, superficial wounds, ulcus cruris, and superficial hematoma. Bacillus cereus AlkD factor is a DNA alkylation repair enzyme that works to recognize damaged DNA and repair it. Recent research determined that the enzyme was able to locate damaged DNA that has a positive electrical charge. Positively charged alkylated bases are among the most abundant and detrimental forms of DNA damage. AlkD forms a series of interactions with the DNA backbone at and around the lesion while the lesion is

still stacked in the double helix. The mechanism capitalizes on intrinsic properties of the lesion, base mispairing and glycosidic bond instability, but does not depend on the specific geometry of the lesion. This allows AlkD to find and remove a wide variety of alkylated bases while guaranteeing that it does not cleave bases from native DNA.

* Flumazenil is a GABA-A receptor antagonist. Flumazenil is of benefit in patients who become excessively drowsy after benzodiazepines are used for either diagnostic or therapeutic procedures. It has been used as an antidote in the treatment of benzodiazepine overdoses. It reverses the effects of benzodiazepines by competitive inhibition at the benzodiazepine binding site on the GABA-A receptor. It is also sometimes used to reverse the effects of benzodiazepines after surgery in a manner similar to naloxone's application to reverse the effect of opiates and opioids following surgery. Flumazenil has been effectively used to treat overdoses of non-benzodiazepine hypnotics, such as zolpidem, zaleplon and zopiclone. It may also be effective in reducing excessive daytime sleepiness while improving vigilance in primary hypersomnias, such as idiopathic hypersomnia. It has also been used in hepatic encephalopathy, though results have been mixed. Flumazenil does not antagonize all of the central nervous system effects of drugs affecting GABA-ergic neurons by means other than the benzodiazepine receptor (including ethanol, barbiturates, or general anesthetics) and does not reverse the effects of opioids. Flumazenil has been shown to antagonize sedation, impairment of recall, psychomotor impairment and ventilatory depression produced by benzodiazepines in healthy human volunteers.

* Graying hair plays simultaneously the frequencies of methionine sulfoxide reductase A and B (MSR A and B), catalase (CAT) and l- methionine. Loss of methionine has been linked to senile greying of hair. Its lack leads to a buildup of hydrogen peroxide in hair follicles, a reduction in tyrosinase effectiveness, and a gradual loss of hair color. MSRA, MSRB and catalase are subject to deactivation by H_2O_2 mediated oxidative stress in a concentration-dependent manner despite two of these enzymes MSRA and MSRB play a critical role in protein repair. The human epidermis expresses high levels of anti-oxidant enzymes to keep the redox homeostasis under control. Low catalase expression/activities leads to hydrogen peroxide (H_2O_2) accumulation in the skin. Such high concentrations of H_2O_2 oxidize L-methionine residues in proteins and peptides to (R and S)-methionine sulfoxide diasteriomers. In normal healthy human skin, methionine sulfoxide reductases A and B specifically reduce methionine sulfoxides (S) and (R), H_2O_2-induced oxidative damage in the entire human hair follicle, inclusive of the hair shaft, affects human hair color by blunting methionine sulfoxide repair.

* Ibudilast is an antiinflammatory drug which acts as a phosphodiesterase inhibitor, inhibiting the PDE-4 subtype to the greatest extent, but also showing significant inhibition of other PDE subtypes. Ibudilast has bronchodilator, vasodilator and neuroprotective effects, and is mainly used in the treatment of asthma and stroke. It inhibits platelet aggregation, and may also be useful in the treatment of multiple sclerosis. Ibudilast crosses the blood–brain barrier and suppresses glial cell activation. This activity has been shown to make ibudilast useful in the treatment of neuropathic pain and it not only enhances analgesia produced by opioid drugs, but also reduces the

development of tolerance. It may have some use reducing methamphetamine and alcohol addiction.

* Iptakalim hydrochloride is a K(ir) 6.1/SUR2B activator potentially for the treatment of pulmonary arterial hypertension. Hypertension is a multifactorial disorder, and effective blood pressure control is not achieved in most individuals. Overall, almost 75% of adults with cardiovascular diseases/comorbidities have hypertension, which is associated with a shorter overall life expectancy. Alarmingly, rates of prehypertension and hypertension are increasing among children and adolescents due, in part, to the obesity epidemic we currently face. There is also the problem of an aging population and the growing rates of diabetes and obesity in adults, all factors that are associated with high blood pressure. Because of this high selectivity, IPT does not exhibit the adverse side effects associated with the older nonspecific K+ channel openers, which limit their use to the treatment of severe or refractory hypertension. IPT produces arteriolar and small artery vasodilatation, with no significant effect on capacitance vessels or large arteries. Vasodilatation is induced by causing cellular hyperpolarization via the opening of K+ channels, which in turn decreases the opening probability of L-type Ca2+ channels. Of particular note IPT is very effective in lowering the blood pressure of hypertensive humans but not of those with normal blood pressure. It is also a novel compound that can selectively block alfa4 subtypes of nAChRs to prevent smoking-induced “reward”, to limit increasing nicotine- induced dopamine release, and/or to diminish nicotinic withdrawal symptoms. Iptakalim may function as a novel antopsychotic drug, an also confers an antidepressant effect in a chronic mild stress model of depression through regulating neuro-inflammation and neurogenesis.

* Izumo protein and YLP12 (YLPVGGLRRIGG) peptide are sperm-specific molecules that are excellent candidates for contraception vaccine (CV) development. Development of CV is somewhat uniquely challenging because, unlike other vaccines, CV have to be used by healthy individuals and require close to 100% efficacy. CV should be free of side effects, thus only sperm-specific molecules can be used for antisperm CV development. There is an urgent need to develop a better method of contraception which is non-steroidal and reversible to control world population explosion and unintended pregnancies. Contraceptive vaccines (CV), especially targeting sperm-specific proteins, can provide an ideal contraceptive modality. Sperm-specific proteins can induce an immune response in women as well as men, thus can be used for CV development in both sexes. Izumo protein is essential for sperm–egg membrane fusion. Vaccination with Izumo protein or its cDNA may cause a significant reduction in fertility of females. A significant percentage of infertile women have antibodies to Izumo protein. The second sperm-specific protein is YLP12, a peptide mimetic sequence present on human sperm involved in recognition and binding to the human oocyte zona pellucida. Vaccination with YLP12 or its cDNA causes long-term, reversible contraception, without side effects, in female mice. Infertile, but not fertile, men and women have antibodies to YLP12 peptide.

* Mebendazole is a medication used to treat a number of parasitic worm infestations. This includes ascariasis, pinworm disease, hookworm infections, guinea worm

infections, hydatid disease, and giardia, among others. Mebendazole is a highly effective, broad-spectrum antihelmintic indicated for the treatment of nematode infestations, including roundworm, hookworm, whipworm, threadworm, pinworm, and the intestinal form of trichinosis prior to its spread into the tissues beyond the digestive tract. Several studies show mebendazole exhibits potent antitumor properties. MBZ significantly inhibited cancer cell growth, migration, and metastatic formation of adrenocortical carcinoma, both in vitro and in vivo. Treatment of lung cancer cell lines with MBZ caused mitotic arrest, followed by apoptotic cell death with the feature of caspase activation and cytochrome c release. MBZ induced a dose- and time-dependent apoptotic response in human lung cancer cell lines, and apoptosis via Bcl-2 inactivation in chemoresistant melanoma cells.

* Mitochondrial Complex II is less efficient in senescent cells from older individuals, which could have implications in terms of deciphering the causes of the overall decrease in cellular efficiency observed with age. Higher levels of ROS generation are present in senescent compared to nonsenescent cells, potentially resulting in increased mitochondrial DNA and nuclear DNA damage and mitochondrial dysfunction and a possible decrease in complex II activity if damage becomes sufficiently high. Damage to senescent cells may be higher in the skin of older individuals because of the lower levels of antioxidants observed with age, as well as the age-related decline of senescent cell removal systems such as the immune system and the autophagy/lysosomal pathway. These factors could result in lower complex II activity in senescent cells of older individuals.

* NR3C1 factor is the receptor to which cortisol and other glucocorticoids bind. The glucocorticoid receptor is expressed in almost every cell in the body and regulates genes controlling the development, metabolism, and immune response. Because the receptor gene is expressed in several forms, it has many different (pleiotropic) effects in different parts of the body. When the GR binds to glucocorticoids, its primary mechanism of action is the regulation of gene transcription. The unbound receptor resides in the cytosol of the cell. After the receptor is bound to glucocorticoid, the receptor-glucorticoid complex can take either of two paths. The activated GR complex up-regulates the expression of anti-inflammatory proteins in the nucleus or represses the expression of pro-inflammatory proteins in the cytosol (by preventing the translocation of other transcription factors from the cytosol into the nucleus). In central nervous system structures, the glucocorticoid receptor is a novel representative of neuroendocrine integration, functioning as a major component of endocrine influence - specifically stress response - upon the brain. The receptor is now implicated in both short and long-term adaptations seen in response to stressors and may be critical to the understanding of psychological disorders, including some or all subtypes of depression and post-traumatic stress disorder (PTSD). Indeed, long-standing observations such as the mood dysregulations typical of Cushing's disease demonstrate the role of corticosteroids in regulating psychologic state; recent advances have demonstrated interactions with norepinephrine and serotonin at the neural level.

* Nerve strength features Methylcobalamin, Thiamine, R Lipoic acid, Pyridoxal

phosphate and Folic acid as Levomefolic acid. Methylcobalamin is used in the treatment of peripheral neuropathy, diabetic neuropathy, and as a preliminary treatment for amyotrophic lateral sclerosis. Thiamine or vitamin B1 is used by the body to convert carbohydrates into energy and to maintain normal nerve function. R Lipoic acid can pass easily into the brain, it may help protect the brain and nerve tissue. Pyridoxal phosphate the active form of vitamin B 6, is a coenzyme in a variety of enzymatic reactions, inadequate levels of pyridoxal phosphate in the brain can cause neurological dysfunction, particularly epilepsy. Levomefolic acid is the primary biologically active form of folic acid or vitamin B9, one of its most notable functions is its role in creating key neurotransmitters or brain chemicals that regulate human mood, cognitive ability and arousal.

* Niacin, also known as vitamin B3 and nicotinic acid, is an organic compound primarily used to treat hypercholesterolemia (high cholesterol) and pellagra (niacin deficiency). Insufficient niacin in the diet can cause nausea, skin and mouth lesions, anemia, headaches, and tiredness. The lack of niacin may also be observed in pandemic deficiency disease, which is caused by a lack of five crucial vitamins (niacin, vitamin C, thiamin, vitamin D, and vitamin A) and is usually found in areas of widespread poverty and malnutrition. Niacin has a molecule similar to nicotine which may reduce smoking addiction naturally.

* PF-04991532 is a potent and hepatoselective glucokinase activator that reduces mean daily glucose (MDG), fasting plasma glucose (FPG) and glucose excursion in humans. PF-04991532 has been used in trials studying the basic science of Diabetes Mellitus, Type 2 Diabetes Mellitus, and Glucose.

* PRG4 factor encodes proteoglycan 4 or lubricin. This proteoglycan acts as a joint/boundary lubricant. It also prevents protein deposition onto cartilage from synovial fluid by controlling adhesion-dependent synovial growth and inhibiting the adhesion of synovial cells to the cartilage surface. Lubricin is present in synovial fluid and on the surface (superficial layer) of articular cartilage and therefore plays an important role in joint lubrication and synovial homeostasis. The expression of lubricin has also been detected and the protein localized in tendon, meniscus, lung, liver, heart, bone, ligament, muscle, and skin.

* Pseudomonas-NicA2 factor or Putative nicotine oxyreductase found in the bacteria Pseudomonas putida degrades nicotine. Research shows that reduces the half-life of nicotine to nine minutes from two to three hours.

* RQ-00000010 for the treatment of GERD, functional dyspepsia and chronic constipation. Is useful for treating diseases mediated by 5-HT4 receptor activity eg such as gastroesophageal reflux disease (GERD), gastric motility disorder, dyspepsia, constipation, esophagitis, diabetes, CNS and cardiovascular diseases. RQ 00000010, 5-HT4 receptor agonist, which is useful in the treatment or alleviation of disease conditions mediated by 5-HT4 receptor activity; in particular 5-HT4 receptor agonistic activity, such as gastroesophageal reflux disease (GERD), gastrointestinal disease,

gastric motility disorder, non-ulcer dyspepsia, functional dyspepsia (FD), irritable bowel syndrome (IBS), constipation, dyspepsia, esophagitis, gastroesophageal disease, gastritis, nausea, central nervous system disease, Alzheimer's disease, cognitive disorder, emesis, migraine, neurological disease, pain, cardiovascular disorders, cardiac failure, heart arrhythmia, diabetes, and apnea syndrome.

* Setipiprant is a prostaglandin D2 (PGD2) antagonist.It was initially researched as a treatment for allergies and inflammatory disorders, particularly asthma, but despite being well tolerated in clinical trials and showing reasonable efficacy against allergen-induced airway responses in asthmatic patients it failed to show sufficient advantages over existing drugs and was discontinued from further development in this application. However, following the discovery in 2012 that the prostaglandin D2 receptor (DP/PGD2) is expressed at high levels in the scalp of men affected by male pattern baldness, the rights to setipiprant were acquired as a novel treatment for baldness, with a previously unexploited mechanism of action. The response to allergen exposure in a previously sensitized host results in a cascade effect involving numerous cell types and release of a number of cytokines, chemokines, and multiple mediators. Among these critical initiators are the cytokines interleukin (IL)-4, IL-13, and IL-5, which play critical roles in Th2 cell differentiation, immunoglobulin (Ig)E synthesis, mast cell growth and differentiation, upregulation of CD23 expression, and the differentiation, recruitment, and activation of eosinophils. The stimulated release of the array of mediators, causes end-organ damage, including constriction and hyperresponsiveness, vascular permeability, edema, mucous secretion, and further inflammation.

* Taurine promotes cardiovascular health, insulin sensitivity, electrolyte balance, hearing function, and immune modulation. In animal research, taurine protected against heart failure, reducing mortality by nearly 80%. Its benefits are so broad and extensive that scientists have described taurine as "a wonder molecule. Taurine is found abundantly in healthy bodies. However, certain diets, particularly vegetarian or vegan diets, lack adequate amounts of taurine. Disease states—including liver, kidney, or heart failure, diabetes, and cancer—can all cause a deficiency in taurine. And aging bodies often cannot internally produce an optimal amount of taurine, making supplementation vital.

* Vitamin C forms is a mix of frecuencies from Dehydroascorbic acid, Ascorbic acid, Sodium ascorbate and, L-gulonolactone oxidase (vitamin C gene).

* Vitamins A, B3, C, D. Vitamin A as Retinol, vitamin B3 as Niacin, vitamin C, and vitamin D as the calcitriol receptor, also known as the vitamin D receptor. Many of the non-visual functions of vitamin A are mediated by retinoic acid, which regulates gene expression by activating nuclear retinoic acid receptors. The non-visual functions of vitamin A are essential in the immunological function, reproduction and embryonic development of vertebrates. Niacin is used to treat hypercholesterolemia (high cholesterol) and to decrease the risk of cardiovascular disease. Vitamin C is a highly effective antioxidant, it also acts as an electron donor for important enzymes. The calcitriol receptor is also known as the vitamin D receptor (VDR) plays an important role in regulating the hair cycle and calcium homeostasis. Loss of VDR is associated with

hair loss in experimental animals.

* Zucapsaicin is a medication used to treat osteoarthritis of the knee and other neuropathic pain. It is applied three times daily for a maximum of three months. It reduces pain, and improves articular functions. It is the cis-isomer of capsaicin. Zucapsaicin has been tested for treatment of a variety of conditions associated with ongoing nerve pain. This includes herpes simplex infections; cluster headaches and migraine; and knee osteoarthritis.

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ADH Factor, AFN-1252, Acetyl-Trans-Resveratrol, BPI(10-193)C132A Peptide, Carnosine, Cat PAD Peptide, Dihydroartemisin-Piperaquine, Dipyridamole, EDIL3 Factor, Epclusa, Eucalyptol, FBN1 Factor, Hydroxycitric Acid (HCA), ITGB1-FN1 Factors, Idebenone, LMTX Leuco-Methylthioninium, Licoricidin-Licorisoflavan A, Lugdunin, Meldonium, NELL1 Factor, OC-000459, PLAT Factor, PLG Factor, Polaprezinc, Ramatroban, STRQ-Streptokinase C Factor, Silicon Nitride, Thymoquinone, Urolithin-A, Ursodiol

* ADH factor or Vasopressin, also known as antidiuretic hormone (ADH), is a neurohypophysial hormone found in most mammals. In most species it contains arginine and is thus also called arginine vasopressin (AVP) or argipressin. Its two primary functions are to retain water in the body and to constrict blood vessels. Vasopressin increases peripheral vascular resistance, which in turn increases arterial blood pressure. It plays a key role in homeostasis, by the regulation of water, glucose, and salts in the blood. It is derived from a preprohormone precursor that is synthesized in the hypothalamus and stored in vesicles at the posterior pituitary. Most of it is stored in the posterior pituitary to be released into the bloodstream. However, some AVP may also be released directly into the brain, and accumulating evidence suggests it plays an important role in social behavior, sexual motivation and pair bonding, and maternal responses to stress. Decreased AVP release (neurogenic - i.e. due to alcohol intoxication or tumour) or decreased renal sensitivity to AVP (nephrogenic, i.e. by mutation of V2 receptor or AQP) leads to diabetes insipidus, a condition featuring hypernatremia (increased blood sodium concentration), polyuria (excess urine production), and polydipsia (thirst). High levels of AVP secretion may lead to hyponatremia.

* AFN-1252 (Debio 1452) is designed to inhibit an enzyme called FabI in Staphylococcus species only. FabI controls the rate of fatty acid synthesis, a process required for bacterial cell membrane production and cell division. Although some other bacterial groups use FabI, Debio1452 targets an active site unique to the staphylococcal (Staphylococcus aureus) version of the enzyme. Historically, antibiotics

have been designed to kill off many different species of bacteria, giving clinicians an efficient and inexpensive way to treat a range of infections. But these broad-spectrum drugs can wreak havoc on a patient’s gut microbiome. Disrupting gut microbiota can lead to complications such as an overgrowth of resident species like Clostridium difficile, one major cause of healthcare-related infection. AFN-1252 is a pathogen-selective antibiotic which minimizes disturbance to the microbiome.

* Acetyl-trans-resveratrol from Resveratrol is an antioxidant commonly found in red wine and many plants, may offer protection against radiation exposure. When altered with acetyl, resveratrol administered before radiation exposure proved to protect cells from radiation in mouse models. Acetylated analogs of resveratrol exhibit the same or higher inhibitory effects on various tumor cell lines than resveratrol itself while being absorbed faster and resisting cellular breakdown. Since the acetylated resveratrol is being absorbed more quickly, plasma levels in the body reach a higher level and at a faster rate. Through ester hydrolysis enzymes in the body actually break down acetylated resveratrol back to its natural phenolic form.

* Bactericidal/permeability-increasing protein BPI(10-193)C132A peptide after ischemia reduces endotoxemia, the interleukin-6 response, and attenuates pulmonary leuko-sequestration in response to hind limb reperfusion injury. Lower limb ischemia-reperfusion injury triggers a systemic inflammatory response and multiple organ dysfunction. Hence, restoration of blood flow to an acutely ischemic lower limb may, paradoxically, result in systemic complications and unexpected mortality.

* Carnosine acts as an antiglycating agent, reducing the rate of formation of advanced glycation end-products (AGEs) (substances that can be a factor in the development or worsening of many degenerative diseases, such as diabetes, atherosclerosis, chronic renal failure, and Alzheimer's disease), and ultimately reducing development of atherosclerotic plaque build-up. Chronic glycolysis is speculated to accelerate aging, making carnosine a candidate for therapeutic potential. Carnosine has been proven to scavenge reactive oxygen species (ROS) as well as alpha-beta unsaturated aldehydes formed from peroxidation of cell membrane fatty acids during oxidative stress. Carnosine is also a zwitterion, a neutral molecule with a positive and negative end. A vegetarian (especially vegan) diet provides less carnosine, compared to levels found in a more typical diet including meat. Carnosine can chelate divalent metal ions. Carnosine can increase the Hayflick limit in human fibroblasts, as well as appearing to reduce the telomere shortening rate. Carnosine is also considered as a geroprotector.

* Cat-PAD is a cat peptide antigen desensitisation for treating cat allergic rhinoconjunctivitis.

* Dihydroartemisinin is a drug used to treat malaria. Dihydroartemisinin is the active metabolite of all artemisinin compounds (artemisinin, artesunate, artemether, etc.) and is also available as a drug in itself. It is a semi-synthetic derivative of artemisinin and is widely used as an intermediate in the preparation of other artemisinin-derived antimalarial drugs. Piperaquine is an antimalarial drug, a bisquinoline, characterized by

slow absorption and a long biological half-life, making it a good partner drug with artemisinin derivatives which are fast acting but have a short biological half-life.

* Dipyridamole is a cardiovascular drug, used for treating angina and preventing stroke. It also has wide applicability for eye disorders including diabetic retinopathy, ocular hypertension, retinal hemorrhage, and pterygium. Pterygium, or Surfer's Eye, is a benign growth that affects 10 percent of the population worldwide. It is more prevalent with older age. An early-stage pterygium is known as a pinguecula, and affects 50 percent of the population. Besides being unsightly, pterygium and pinguecula often become inflamed and cause dry eye. Eventually, they can completely obstruct vision.

* EDIL3 (Del-1) factor' protein is known to restrain the immune system by stopping white blood cells from sticking to and attacking mouth tissue. New research reveals that deterioration in gum health which often occurs with increasing age is associated with a drop in the level of a protein produced by EDIL3. Mice that had no Del-1 developed severe gum disease and elevated bone loss and researchers found unusually high levels of white blood cells in the gum tissue. When they treated the gums of the mice with Del-1, the number of white blood cells dropped, and gum disease and bone loss were reduced.

* Epclusa is a two drug-combination for hepatitis C, Sofusbuvir and Velpatasvir.

* Eucalyptol is a cyclic ether and a monoterpenoid. Eucalyptol is used as an insecticide and insect repellent. In contrast, eucalyptol is one of many compounds that are attractive to males of various species of orchid bees, which gather the chemical to synthesize pheromones; it is commonly used as bait to attract and collect these bees for study. One such study with Euglossa imperialis, a non-social orchid bee species, has shown that the presence of cineole (also eucalyptol), elevates territorial behavior and specifically attracts the male bees. It was even observed that these males would periodically leave their territories to forage for chemicals such as cineole, thought to be important for attracting and mating with females, to synthesize pheromones. Eucalyptol controls airway mucus hypersecretion and asthma, it is also an effective treatment for nonpurulent rhinosinusitis. Treated subjects experienced less headache on bending, frontal headache, sensitivity of pressure points of trigeminal nerve, impairment of general condition, nasal obstruction, and rhinological secretion. Side effects from treatment were minimal.

* FBN1 factor encodes the protein Fibrilin-1. This gene encodes a member of the fibrillin family. The encoded protein is a large, extracellular matrix glycoprotein that serves as a structural component of 10-12 nm calcium-binding microfibrils. These microfibrils provide force bearing structural support in elastic and nonelastic connective tissue throughout the body. Mutations in this gene are associated with Marfan syndrome, isolated ectopia lentis, autosomal dominant Weill-Marchesani syndrome, MASS syndrome, and Shprintzen-Goldberg craniosynostosis syndrome.

* Hydroxycitric acid (HCA), a derivative of citric acid found in some tropical fruits, is a

competitive inhibitor of ATP citrate lyase, which converts citrate into oxaloacetate and acetyl CoA. The reverse of this conversion is a step in the citric acid cycle. Laboratory and animal studies of HCA have produced results that indicate a potential for modulation of lipid metabolism. Researchers at the University of Houston reported hydroxycitrate is capable of dissolving calcium oxalate crystals, a component of human kidney stones. This is an unusual effect because it is rare for a crystal to dissolve while in a supersaturated growth solution.

* ITGB1 factor or beta1-integrin maintains a link between the stem cell and its environment and interacts biochemically with fibroblast growth factor (FGF) to promote stem cell proliferation and restoration after muscle tissue injury. Aged stem cells do not respond to FGF. Beta1-integrin restores aged stem cells' ability to respond to FGF to grow and improve muscle regeneration. Fibronectin (FN) is a high-molecular weight ECM glycoprotein that binds to attachment proteins such as integrins. Just like integrins, fibronectin binds extracellular matrix components such as collagen, fibrin, and heparin sulfate proteoglycans. Aged stem cell niche in skeletal muscle contains substantially reduced levels of fibronectin (FN), leading to detrimental consequences. Reconstitution of FN levels in the aged niche remobilizes stem cells and restores youth-like muscle regeneration. Improvement in regeneration, strength, and function were also seen when this treatment was applied to animals with muscular dystrophy. Aged muscle stem cells with compromised beta1-integrin activity and aged muscles with insufficient amount of fibronectin are both root causes of muscle aging.

* Idebenone is a drug that was initially developed for the treatment of Alzheimer's disease and other cognitive defects. Chemically, idebenone is an organic compound of the quinone family. It is also promoted commercially as a synthetic analog of coenzyme Q10 (CoQ10). In cellular and tissue models, idebenone acts as a transporter in the electron transport chain of mitochondria and thus increases the production of adenosine triphosphate (ATP) which is the main energy source for cells, and also inhibits lipoperoxide formation. Positive effects on the energy household of mitochondria has also been observed in animal models. Idebenone improved learning and memory in experiments with mice. Research on idebenone as a potential therapy of Alzheimer's disease have been inconsistent, but there may be a trend for a slight benefit. It is a safe treatment for Friedreich's ataxia (FA), exhibiting a positive effect on cardiac hypertrophy and neurological function. Indications being explored include Duchenne muscular dystrophy, Leber's hereditary optic neuropathy, MELAS (mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes) and primary progressive multiple sclerosis. Idebenone is claimed to have properties similar to CoQ10 in its antioxidant properties, and has therefore been used in anti-aging on the basis of free-radical theory. Clinical evidence for this use is missing. It has been used in topical applications to treat wrinkles.

* LMTX or Leuco-methylthioninium is a tau protein aggregation inhibitor. It acts by preventing the formation and spread of neurofibrillary tangles, which consist of aberrant tau protein clusters that aggregate within neurons causing toxicity and neuronal cell death in the brain of patients with certain forms of dementia. Dementia is a chronic

progressive mental disorder which is largely irreversible and is characterised by a widespread impairment of mental function. Frontotemporal dementia (FTD) is a heterogeneous group of dementias that cause frontotemporal lobe degeneration. There are three main clinical syndromes of FTD. The most common type is bvFTD, which is characterised by early progressive personality changes, emotional blunting and loss of empathy. Patients may also experience difficulty in ameliorating their behaviour, often causing socially inappropriate actions. Patients often lose insight into their own behaviour. Language impairment can also occur after behavioural changes and there is sometimes overlap of clinical symptoms of the different syndromes of FTD. As with most forms of FTD, patients' personal hygiene often suffers, mood changes are frequent and abrupt and patients can become apathetic.

* Licoricidin and licorisoflavan A are effective antibacterial substances. In a study, these substances killed two of the major bacteria responsible for dental cavities and two of the bacteria that promote gum disease. One of the compounds -- licoricidin -- also killed a third gum disease bacterium. Traditional medical practitioners use dried licorice root to treat various ailments, such as respiratory and digestive problems, but few modern scientific studies address whether licorice really works.

* Lugdunin is a new antibiotic from bacteria inside the human nose. This bacterium produces a substance capable of killing a range of bacteria, including the strain of drug-resistant Staphylococcus aureus known as MRSA and a strain of Enterococcus resistant to the antibiotic Vancomycin. However, it is thought that only 10% of people naturally carry S. lugdunensis in their nasal passages. Lugdunin is bactericidal against major pathogens, effective in animal models, and not prone to causing development of resistance in S. aureus. Notably, human nasal colonization by S. lugdunensis was associated with a significantly reduced S. aureus carriage rate, suggesting that lugdunin or lugdunin-producing commensal bacteria could be valuable for preventing staphylococcal infections.

* Meldonium may be used to treat coronary artery disease. These heart problems may sometimes lead to ischemia, a condition where too little blood flows to the organs in the body, especially the heart. Because this drug is thought to expand the arteries, it helps to increase the blood flow as well as increase the flow of oxygen throughout the body. Meldonium has also been found to induce anticonvulsant and antihypnotic effects involving alpha 2-adrenergic receptors as well as nitric oxide-dependent mechanisms. This, in summary, shows that meldonium given in acute doses could be beneficial for the treatment of seizures and alcohol intoxication. It may also have some effect on decreasing the severity of withdrawal symptoms caused by the cessation of chronic alcohol use. Meldonium demonstrates an increase in endurance performance of athletes, improved rehabilitation after exercise, protection against stress, and enhanced activations of central nervous system (CNS) functions. It is opposing to steroids in the sense that instead of making the athlete emotionally unstable and readily irritable, it keeps them in an elevated state of mind and keeps their emotions in a happier state. Meldonium cannot improve athletic performance, but it can stop tissue damage in the case of ischemia, which is lack of blood flow to an area of the body.

* NELL-1 factor encodes a cytoplasmic protein that contains epidermal growth factor (EGF) -like repeats. The encoded heterotrimeric protein may be involved in cell growth regulation and differentiation. A similar protein in rodents is involved in craniosynostosis. An alternative splice variant has been described but its full-length sequence has not been determined. Recent study by UCLA researchers shows that administering the protein NELL-1 intravenously stimulates significant bone formation through the regenerative ability of stem cells.

* OC-000459 significantly reduces both nasal and ocular symptoms in allergic subjects after exposure to grass pollen. Treatment with OC-000459 is well tolerated and leads to a significant and persistent reduction in the symptoms of rhinoconjunctivitis. The CRTH2 antagonist OC-000459 reduces airway inflammation and improves lung function in moderate persistent asthma. OC-000459 is a potent, selective, and orally active DP2 antagonist that retains activity in human whole blood and inhibits mast cell-dependent activation of both human Th2 lymphocytes and eosinophils. It has also been used for the treatment of baldness.

* PLAT factor or tissue plasminogen activator (abbreviated tPA) is a protein involved in the breakdown of blood clots. It is a serine protease found on endothelial cells, the cells that line the blood vessels. As an enzyme, it catalyzes the conversion of plasminogen to plasmin, the major enzyme responsible for clot breakdown. Because it works on the clotting system, tPA used in clinical medicine to treat embolic or thrombotic stroke. Use is contraindicated in hemorrhagic stroke and head trauma. tPA is used in some cases of diseases that feature blood clots, such as pulmonary embolism, myocardial infarction, and stroke, in a medical treatment called thrombolysis. It has been suggested that if tPA is effective in ischemic stroke, it must be administered as early as possible after the onset of stroke symptoms. tPA and plasmin are the key enzymes of the fibrinolytic pathway in which tPA mediated plasmin generation occurs. tPA cleaves the zymogen plasminogen into the serine protease plasmin. Increased enzymatic activity causes hyperfibrinolysis, which manifests as excessive bleeding. Decreased activity leads to hypofibrinolysis which can result in thrombosis or embolism. In ischemic stroke patients, decreased tPA activity was reported to be associated with an increase in plasma P-selectin concentration. Tissue plasminogen activator also plays a role in cell migration and tissue remodeling.

* PLG factor or Plasmin is an important enzyme present in blood that degrades many blood plasma proteins, including fibrin clots. The degradation of fibrin is termed fibrinolysis. Plasmin is a serine protease that acts to dissolve fibrin blood clots. Apart from fibrinolysis, plasmin proteolyses proteins in various other systems: It activates collagenases, some mediators of the complement system and weakens the wall of the Graafian follicle (leading to ovulation). It cleaves fibrin, fibronectin, thrombospondin, laminin, and von Willebrand factor. In circulation, plasminogen adopts a closed, activation resistant conformation. Upon binding to clots, or to the cell surface, plasminogen adopts an open form that can be converted into active plasmin by a variety of enzymes, including tissue plasminogen activator (tPA), urokinase plasminogen

activator (uPA), kallikrein, and factor XII (Hageman factor). Deficiency in plasmin may lead to thrombosis, as clots are not degraded adequately. Plasminogen deficiency in mice leads to defective liver repair, defective wound healing, reproductive abnormalities. It might be used as add-on in the management of diabetes, hypertension, hypercholesterolemia, stroke, ischemic heart disease and other conditions associated with hypercoagulation. It might improve the circulation of blood by gradually dissolving blood clots inside the veins therefore minimizing the risk of heart attacks and strokes.

* Polaprezinc is a chelate of zinc and L-carnosine. The compound maintains homeostasis of the gastric mucosa by prostaglandin-independent cytoprotective effects due to anti-oxidative membrane stabilizing actions, and it promotes the repair of damaged tissues by wound healing action. It has a stimulatory effect on bone formation and a restorative effect on bone loss under various pathophysiologic conditions. ‘Leaky gut’ is a condition where the thin mucosal barrier of the gut, which plays a role in absorbing nutrients and preventing large molecules and germs from the gut entering the blood stream, becomes less effective. It is a particular problem for those taking part in heavy exercise or who are active in hot conditions. It can lead to ‘heat stroke’ (especially in military personnel deployed to countries with high temperatures) and gut symptoms in athletes. It may be helpful for anyone exercising at their peak in hot and humid conditions.

* Ramatroban is a thromboxane receptor antagonist. It is also a DP2 receptor antagonist. It is indicated for the treatment of coronary artery disease. It has also been used for the treatment of asthma and baldness.

* Streptococcus equisimilis (STRQ) streptokinase C (skc) is an enzyme secreted by several species of streptococci that can bind and activate human plasminogen. SK is used as an effective and inexpensive thrombolysis medication in some cases of myocardial infarction (heart attack) and pulmonary embolism. Streptokinase belongs to a group of medications known as fibrinolytics, and complexes of streptokinase with human plasminogen can hydrolytically activate other unbound plasminogen by activating through bond cleavage to produce plasmin. It is usually given only for a person's first heart attack. Further thrombotic events could be treated with Tissue plasminogen activator (tPA). If percutaneous coronary intervention (PCI) is not available within 90 minutes of first contact, streptokinase is recommended intravenously as soon as possible after the onset of a ST elevation myocardial infarction (STEMI). As Streptokinase is a bacterial product, the body has the ability to build up an immunity to it. Plasmin is produced in the blood to break down fibrin, the major constituent of blood thrombi, thereby dissolving clots once they have fulfilled their purpose of stopping bleeding. Extra production of plasmin caused by streptokinase breaks down unwanted blood clots, for example, in the lungs (pulmonary embolism). As a potential virulence factor, it is thought to prevent the formation of effective fibrin barriers around the site of infection, thereby contributing to the invasiveness of the cells.

* Silicon nitride changes the metabolism of Porphyromonas gingivalis -- the bacteria species primarily responsible for periodontitis. Gum disease is caused by bacteria that

infect the tissue around teeth, resulting in gum inflammation. If the condition progresses, the bacteria can damage the bone that supports the teeth. In addition to tooth loss, periodontitis can increase a person's risk of heart attack or stroke. The chemical reactions at the surface cause the bacteria's nucleic acids to degrade and drastically reduce the amounts of certain proteins and fats.

* Thymoquinone an extract of nigella sativa seed oil, has antioxidant effects and has been shown to protect against heart, liver and kidney damage in animal studies as well as having possible anti-cancer effects. It also has analgesic and anticonvulsant effects in animal models. It is an angiogenesis inhibitor. In 2008 in-vitro tests showed it was an HDAC inhibitor, affecting genes such p53, Bax, bcl-2 and p21. Thymoquinone has been studied for its potential effects on colon cancer cells. It reduces mouse colon tumor cell invasion and inhibits tumor growth in animal models of colon cancer and, it also blocks pancreatic cancer cell growth and kills the cells by enhancing the process of programmed cell death. Traditionally, it has been used in different forms to treat many diseases including asthma, hypertension, diabetes, inflammation, cough, bronchitis, headache, eczema, fever, dizziness and influenza. Experimentally, it has evidently proved its activity as hepatoprotective, anti-inflammatory, antioxidant, cytotoxic and anti-cancer chemical, with specific mechanisms of action.

* Urolithin-A is generated by gut microflora as a natural metabolite of ellagitannins, a class of compounds found in the pomegranate and other fruits and nuts. Urolithin A, improves mitochondrial and muscle function, resulting in enhanced muscle strength and endurance during aging. Declining skeletal muscle mass and the resulting loss of strength are hallmarks of aging. These changes can become debilitating and lead to a condition termed sarcopenia. Mitophagy declines in cells as we age, and the reduction in mitochondrial function in the muscles of the elderly is thought to be one of the main causes of age-related muscle impairment.

* Ursodiol or ursodeoxycholic acid, from the root-word for bear urso, as bear bile contains the substance, is one of the secondary bile acids, which are metabolic byproducts of intestinal bacteria. Primary bile acids are produced by the liver and stored in the gall bladder. When secreted into the intestine, primary bile acids can be metabolized into secondary bile acids by intestinal bacteria. Primary and secondary bile acids help the body digest fats. Ursodeoxycholic acid helps regulate cholesterol by reducing the rate at which the intestine absorbs cholesterol molecules while breaking up micelles containing cholesterol. Because of this property, ursodeoxycholic acid is used to treat (cholesterol) gallstones non-surgically. It is also used to relieve itching in pregnancy for some women who suffer obstetric cholestasis. While some bile acids are known to be colon tumor promoters (e.g. deoxycholic acid), others such as ursodeoxycholic acid are thought to be chemopreventive, perhaps by inducing cellular differentiation and/or cellular senescence in colon epithelial cells. It is believed to inhibit apoptosis. Ursodeoxycholic acid has also been shown experimentally to suppress immune response such as immune cell phagocytosis. Prolonged exposure and/or increased quantities of systemic (throughout the body, not just in the digestive system) ursodeoxycholic acid can be toxic. A Cochrane review looking at primary biliary cirrhosis

found that although ursodeoxycholic acid showed a reduction in liver biochemistry, jaundice, and ascites, it did not decrease mortality or liver transplantation. Ursodiol may be used for biliary stasis in pregnant women to relieve the symptoms of itching and decrease bile absorption. It is unclear as of 2014 if ursodeoxycholic acid is useful for those with cystic fibrosis-related liver disease.

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ABT-263, AF-16 Peptide, AP20187, Agmatine, BGLAP Factor, BOLL Factor, Binaural-THC, C1q Complex, COG-1410, Clostridium-Collagenase, DKK-1 Factor Inhibitors, Deoxycholic Acid, Dexmedetomidine, FGF-9 Factor, Fevipiprant, GNF-6702, GSK-2795039, Inosine, LAL Enzyme, LDLR Factor, Lipolysis Stimulation, Lysozyme, Nalmetrene, Nicotinamide Riboside, Perfluorodecalin, Phylloquinone, RPL-554, SEPT9-GJB1-MPZ-PMP22 Factors, SkQ-1, Tideglusib

* ABT-263 (Navitoclax) is an experimental anti-cancer drug, which is similar in action to obatoclax, except that unlike obatoclax, it does not have off-target effects. Navitoclax inhibits not only Bcl-2, but also Bcl-XL and Bcl-w proteins. Because ABT-263 inhibits Bcl-XL, it reduces platelet lifespan, causing thrombocytopenia, and this makes it dose-limiting. In animal studies, ABT-263 was found to be a senolytic agent, inducing apoptosis in senescent, but not non-senescent cells. ABT263 reduced senescent cells in mice, including senescent bone marrow hematopoietic stem cells and senescent muscle stem cells. This depletion mitigated total-body irradiation-induced premature aging of the hematopoietic system and rejuvenated the aged hematopoietic stem cells and muscle stem cells in normally aged mice.

* AF-16 peptide from Antisecretory factor AF may help treat disorders associated with abnormal fluid distribution in the brain and spinal cord as well as intracranial hypertension. The peptide also decreases high interstitial fluid pressure in solid tumors.

* AP20187 is a small organic compound that facilitated removal of senescent cells, delayed the formation of tumors and reduced age-related deterioration of several organs. Median lifespan of treated mice was extended by 17 to 35 percent. They also demonstrated a healthier appearance and a reduced amount of inflammation in fat, muscle and kidney tissue. Cellular senescence is a biological mechanism that functions as an 'emergency brake' used by damaged cells to stop dividing. While halting cell division of these cells is important for cancer prevention, it has been theorized that once the 'emergency brake' has been pulled, these cells are no longer necessary. The immune system sweeps out the senescent cells on a regular basis, but over time becomes less effective. Senescent cells produce factors that damage adjacent cells and cause chronic inflammation, which is closely associated with frailty and age-related diseases. Senescent cells that accumulate with aging are largely bad, do bad things to

organs and tissues, and therefore shorten life but also the healthy phase of life. And since it is posible to eliminate the cells without negative side effects, it seems a useful therapy against age-related disabilities or diseases or conditions. The advantage of targeting senescent cells is that clearance of just 60-70 percent can have significant therapeutic effects. If translatable, because senescent cells do not proliferate rapidly, a drug could efficiently and quickly eliminate enough of them to have profound impacts on healthspan and lifespan.

* Agmatine is a chemical substance which is naturally created from the chemical arginine. Agmatine has been shown to exert modulatory action at multiple molecular targets, notably: neurotransmitter systems, ion channels, nitric oxide (NO) synthesis and polyamine metabolism. Agmatine was discovered in 1910 but it took more than 100 years to find the exact functions of the chemical. A year after its discovery, it was found that Agmatine could increase blood flow in rabbits. In the 1920s, researchers showed that agmatine can exert mild hypoglycemic effects. In 1994, the discovery of endogenous agmatine synthesis in mammals occurred. Potential medical uses for agmatine are in cardiovascular health, glucose regulation, kidney functions, neurotransmission and, opioid liability.

* BGLAP factor or bone gamma-carboxyglutamic acid-containing protein (BGLAP) encodes osteocalcin, a noncollagenous protein found in bone and dentin. Because it has gla domains, its synthesis is vitamin K dependent. Osteocalcin is secreted solely by osteoblasts and thought to play a role in the body's metabolic regulation and is pro-osteoblastic, or bone-building, by nature. It is also implicated in bone mineralization and calcium ion homeostasis. Osteocalcin acts as a hormone in the body, causing beta cells in the pancreas to release more insulin, and at the same time directing fat cells to release the hormone adiponectin, which increases sensitivity to insulin. Osteocalcin acts on Leydig cells of the testis to stimulate testosterone biosynthesis and therefore affect male fertility. Osteocalcin naturally declines in humans as we age, beginning in women at age 30 and in men at age 50. A recent study describes this first bone-derived hormone known to affect exercise capacity and shows that osteocalcin can reverse the age-related exercise capacity decline in mice. The hormone is powerful enough to reconstitute, in older animals, the muscle function of young animals. Muscles and bones are close to each other, but it had never been shown before that bone actually influences muscle in any way. Osteocalcin is not the only hormone responsible for adaptation to exercise in mice and humans, but it is the only known bone-derived hormone that increases exercise capacity.

* BOLL factor encodes Protein boule-like. This gene belongs to the DAZ gene family required for germ cell development. It encodes an RNA-binding protein which is more similar to Drosophila Boule than to human proteins encoded by genes DAZ (deleted in azoospermia) or DAZL (deleted in azoospermia-like). Loss of this gene function results in the absence of sperm in semen (azoospermia). The boule-like protein appears to be ubiquitously expressed in males of all animal species, except in trichoplax.

* Binaural THC (tetrahydrocannabinol) used in pain relief, Post-traumatic stress disorder

(PTSD), nausea and vomiting, as appetite stimulant, breathing improvement in asthma, glaucoma, and sleep aid.

* C1q complex is a protein complex part of the complement system. It is potentially multivalent for attachment to the complement fixation sites of immunoglobulin. The sites are on the CH2 domain of IgG and, it is thought, on the CH4 domain of IgM. C1q is composed of three subcomponents, C1QA, C1QB and, C1QC. Recent research points to one of its roles in neural connections. The more neural activity there is in one location the stronger the neural circuit connections are. This proves the old truism “practice makes perfect”. What’s more important is our ability of removing old connections which is called “synaptic pruning”. These connections enable dopamine and serotonin (colloquially known as hormones that cause happiness, they do in fact have other purposes) and other similar neurotransmitters (neurohormones) to reach their destinations. They increase the speed of signals between specific neurons. Other glial cells deal with waste, they dispose of harmful substances. Which brings the question, “how do they know which ones to erase? Researchers have started to unravel the mystery but there’s one thing they do know for sure and that’s that nervous connections are marked by the protein C1q. When our “microglial cells” responsible of erasing see this mark they merge with the protein and destroy the nervous connection. That’s how our brain creates new and stronger connections; by making physical room so we can learn more. The brain needs to prune certain connections so that it can construct more fluent and productive neural paths and, it does exactly this while we’re sleeping. Thinking with a well rested brain is like driving home on an empty freeway during rush-hour. The roads are completely empty, no time waste and no unnecessary stops. Neural connections that end up in the “re-cycling bin” are the ones “you” don’t use. Glial cells in the brain will work to strengthen these connections and clear out the unimportant ones. (newworldwow.com/index.php/2016/09/09/scientists-discovered-delete-button-inside-brain)

* COG1410, a small molecule ApoE-mimetic peptide facilitates behavioral recovery and provides neuroprotection after traumatic brain injuries. COG1410 significantly reduces the size of the injury cavity, the number of degenerating neurons in the frontal cortex and, appears to block the development of significant behavioral deficits and reduced tissue loss. COG1410 also reduces airways neutrophilia thus providing anti-inflammatory efficacy against innate immune responses in the airway.

* Clostridium histolyticum collagenase is an enzyme produced by the bacterium Clostridium histolyticum that dismantles collagen. It is used for the treatment of Dupuytren’s contracture and Peyronie’s disease. It is also used in the treatment of skin ulcers and sever burns, collagenase is able to digest collagen in necrotic tissue at physiological pH by hydrolyzing the peptide bonds of undenatured and denatured collagen. Collagenase thus contributes towards the formation of granulation tissue and subsequent epithelization of dermal ulcers and severely burned areas. The action of collagenase may remove substrates necessary for bacterial proliferation or may permit antibodies, leukocytes, and antibiotics better access to the infected area.

* DKK-1 factor inhibitors comprises two inhibitors and DKK-1 protein itself. Threonic acid is a sugar acid derived from threose. The L-isomer is a metabolite of ascorbic acid (vitamin C). One study suggested that because L-threonate inhibits DKK1 expression in vitro, it may have potential in treatment of androgenic alopecia. DKK1 is one of the most upregulated genes in androgen-potentiated balding, with DKK-1 messenger RNA upregulated a few hours after DHT treatment of hair follicles at the dermal papilla in vitro. Neutralizing body against DKK-1 reversed DHT effects on outer root sheath keratinocytes. WAY-262611 is an inhibitor of Dkk1 that activates the Wnt signaling pathway, stimulating beta-catenin/TCF-dependent transcription. Wnt signaling proteins are small secreted proteins that are active in embryonic development, tissue homeostasis, and tumorigenesis. Dickkopf-1 (Dkk1) antagonizes Wnt signaling and has important roles in bone formation, cancer, and Alzheimer’s disease.

* Deoxycholic acid is one of the secondary bile acids, which are metabolic byproducts of intestinal bacteria. Deoxycholic acid has been used since its discovery in various fields of human medicine. In the human body deoxycholic acid is used in the emulsification of fats for the absorption in the intestine. Outside the body it is used in experimental basis of cholagogues and is also in use to prevent and dissolve gallstones. Deoxycholic acid also reduces moderate-to-severe fat below the chin. Its function as a detergent and isolating agent for membrane proteins also suits it for production of outer membrane protein (OMP) vaccines. Deoxycholic acid is one of the main components of the traditional Chinese medicine "Niuhuang", which means "Oxen Yellow" and is bilestone of oxen. This has been in use for two millennia in the unproven belief that it treats inflammations and enhances the immune system. Some publications point towards the effect of deoxycholic acid as an immunostimulant of the non-specific immune system, activating its main actors, the macrophages. According to these publications, a sufficient amount of deoxycholic acid in the human body would correspond with a good immune reaction of the non-specific immune system. Clinical studies confirmed the expectation, that deoxycholic acid is involved in the natural healing processes of local inflammations, different types of herpes, and possibly cancer. Deoxycholic acid and other secondary bile acids cause DNA damage. Secondary bile acids increase intracellular production of reactive oxygen and reactive nitrogen species resulting in increased oxidative stress and DNA damage.

* Dexmedetomidine is an anxiolytic, sedative, and analgesic medication. Similar to clonidine, it is an agonist of alpha2-adrenergic receptors in certain parts of the brain. Dexmedetomidine is notable for its ability to provide sedation without risk of respiratory depression (unlike other commonly used sedatives such as propofol, fentanyl, and midazolam) and can provide cooperative or semi-arousable sedation. Sedation by dexemeditomidine mirrors natural sleep. Dexmedetomidine is also used in veterinary medicine for dogs and cats. Dexmedetomidine is most often used in the intensive care setting for light to moderate sedation. It is not recommended for long term deep sedation. A unique feature of dexmedetomidine is that it has analgesic properties in addition to its role as a hypnotic, but is opioid sparing, and is therefore not associated with significant respiratory depression. Dexmedetomidine can also be used as sedoanalgesic for procedural sedation, such as during colonoscopy. Dexmedetomidine

may be useful for the treatment of the negative cardiovascular effects of acute amphetamines and cocaine intoxication and overdose. There are no absolute contraindications to the use of dexmedetomidine, though it should be used with caution in people with liver disease.

* FGF-9 factor. The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-9 is expressed in specialized T-cells that are used by the immune system to repair damage when the skin is injured. Humans have very low amounts of T-cells that are expressed naturally which can cause areas of skin that have been damaged to heal without hair follicles. FGF-9 has been found to double the number of hair follicles present in areas of skin on mice when it is expressed in the cells. It is believed that these effects could be mimicked on human skin to help to eliminate baldness.

* Fevipiprant is an asthma drug which improves lung function significantly, eases symptoms and repairs the lining of damaged airways. Most existing drugs only ease the symptoms of asthma – with certain drugs widening the airways and others using steroids to calm inflammation. Fevipiprant, however, is the first to use a‘twin attack - it blocks inflammatory cells floating in the airway while also treating the airway lining, stopping it from becoming inflamed and repairing any damage.

* GNF-6702 is the name for a broad-spectrum antiprotozoal drug, with activity against leishmaniasis, Chagas disease and sleeping sickness. These three diseases are caused by related kinetoplastid parasites, which share similar biology. GNF6702 acts as a non-competitive proteasome inhibitor which was effective against infection with any of the three protozoal diseases in mice, while having little evident toxicity to mammalian cells.

* GSK-2795039 is a novel NOX2 inhibitor that is the first small molecule to demonstrate inhibition of the NOX2 enzyme in vivo. Oxidative stress, an excess of reactive oxygen species (ROS) production versus consumption, may be involved in the pathogenesis of different diseases. NOX inhibitors are the most promising therapeutic option for diseases associated with oxidative stress.Oxidative stress is a likely common underlying mechanism for multiple diseases such as cardiovascular diseases, neurodegenerative disorders, and cancer. The term oxidative stress describes the disturbance of the redox hemostasis in favor of increased levels of reactive oxygen species (ROS). It can be caused either by decreased antioxidant capacity due to low concentrations of antioxidants and impaired antioxidant enzyme activity, and/or by increased ROS production due to enhanced activity of ROS-producing entities. Since antioxidant supplementation proved to be non-effective or even detrimental, another therapeutic strategy to fight oxidative stress evolved: Targeting the sources of pathophysiological ROS rather than trying to scavenge ROS in a generalized fashion after they have been produced.

* Inosine has neuroprotective properties. It has been proposed for spinal cord injury because it improves axonal rewiring, and for administration after stroke, because observation has shown that axonal rewiring is encouraged. Inosine is commonly found in tRNAs and is essential for proper translation of the genetic code in wobble base pairs. It is used in the treatment of a variety of autoimmune diseases including granulomatosis with polyangiitis because the uptake of purine by actively dividing B cells can exceed 8 times that of normal body cells, and, therefore, this set of white cells (which cannot operate purine salvage pathways) is selectively targeted by the purine deficiency resulting from inherited metabolic diseases (IMD) inhibition. Inosine produces uric acid that is suggested to be a natural antioxidant and a peroxynitrite scavenger with potential benefits to patients with multiple sclerosis (MS). Peroxynitrite has been correlated with axon degeneration. Despite lack of clinical evidence that it improves muscle development, inosine remains an ingredient in some fitness supplements. Inosine has also been found to be an important feed stimulant by itself or in combination with certain amino acids in some species of farmed fish.

* LAL enzyme plays an important role in breaking down fatty material (cholesteryl esters and triglycerides) in the body. LAL deficiency is an autosomal recessive lysosomal storage disorder characterized by a genetic defect resulting in a marked decrease or loss in activity of the lysosomal acid lipase (LAL) enzyme. The primary site of action of the LAL enzyme is the lysosome, where the enzyme normally causes the breakdown of lipid particles including LDL-c. Deficient LAL enzyme activity results in progressive complications due to the lysosomal accumulation of cholesteryl esters and triglycerides in multiple organs, including the liver, spleen, intestine, and the walls of blood vessels. The resulting lipid accumulation in the liver may lead to increased liver fat content and progression of liver disease, including fibrosis and cirrhosis. Lipid accumulation in the intestinal wall leads to malabsorption and growth failure. In parallel, dyslipidemia due to impaired degradation of lysosomal lipid is common with elevated LDL-c and triglycerides and low HDL-cholesterol (HDL-c). Lysosomal acid lipase affects the atherogenesis by at least two mechanisms: (1) direct targeting of lesional macrophages with resultant decreases in cholesteryl esters and triglyceride in the lysosomes of macrophages in the lesions; (2) systemic effects that mediate the liver to reduce the hepatic cholesteryl ester and triglyceride release, possibly leading to reduced production of VLDL and LDL.

* LDLR factor encodes the Low-density lipoprotein receptor protein. In humans, LDL is directly involved in the development of atherosclerosis,which is the process responsible for the majority of cardiovascular diseases, due to accumulation of LDL-cholesterol in the blood. Hyperthyroidism may be associated with hypocholesterolaemia via upregulation of the LDL receptor, and hypothyroidism with the converse. A vast number of studies have described the relevance of LDL receptors in the pathophysiology of atherosclerosis, metabolomics syndrome, and steatohepatitis.

* Lipolysis stimulation is a mix of L-alpha-phosphatidylcholine, deoxycholic acid sodium salt, ethanol and alpha-tocopherol (Lipostabil). Used in hepatic steatosis due to alchol and metabolic disorders (diabetes, lipidoproteic hypernutrition, obesity and

hyponutrition). As adjuvant in the treatment of intoxications from toxic agents and some kinds of drugs (antitubercolotics; anti-psychotics; anti-epileptics; immunosuppressants). Very useful in the non-toxic treatment of lipid disorders such as hyperlipidiemas and hypercholesterolemia. Steroid users often use this product in an effort to maintain optimum hepatic function. It has been used as a non - toxic supplement for weight reduction, particularly when associated with gross obesity and high serum lipid and cholesterol levels, with very good results. It may be an effective way to combat a few of the toxic effects of anabolic steroids. It is a hepatoprotector.

* Lysozyme is a basic enzyme that is present in saliva, tears, egg white, and many animal fluids. It functions as an antibacterial agent. The enzyme catalyzes the hydrolysis of 1,4-beta-linkages between N-acetylmuramic acid and N-acetyl-D-glucosamine residues in peptidoglycan and between N-acetyl-D-glucosamine residues in chitodextrin. The most significant uses of lysozyme in health supplements derives from its unique properties. Additional benefits include bladder health support, healthy inflammation management and support for wound repair. Lysozyme is an essential component of the immune system, so increased infection and susceptibility to cold and flus indicates a need for lysozyme. Lung infections in newborns and frequent diarrhea in infants are also associated with low lysozyme levels. Lysozyme may also help other types of infection by gram-positive bacteria. Conjunctivitis is another sign that you may need lysozyme.

* Nalmetrene is an opioid antagonist used primarily in the management of alcohol dependence. It has also been investigated for the treatment of other addictions such as pathological gambling. Nalmefene is an opiate derivative similar in both structure and activity to the opioid antagonist naltrexone. Advantages of nalmefene relative to naltrexone include longer half-life, greater oral bioavailability and no observed dose-dependent liver toxicity. As with other drugs of this type, nalmefene can precipitate acute withdrawal symptoms in patients who are dependent on opioid drugs, or more rarely when used post-operatively to counteract the effects of strong opioids used in surgery. There is a case report of nalmefene being effective as an "as-needed" long-term therapy for cravings in a female patient with cocaine addiction. Nalmefene may possess unique potential in the application of cocaine addiction relative to other opioid antagonists such as naltrexone due to its activity as a partial agonist of the k-opioid receptor.

* Nicotinamide riboside is a pyridine-nucleoside form of vitamin B3 that functions as a precursor to nicotinamide adenine dinucleotide or NAD+. NR has been a recent focus of life extension research after a study showing NAD+ levels decrease with age in mice. Another experiment with mice on high fat diet appears to support the potential of treatment or prevention of dyslipidemia with nicotinamide riboside. Nicotinamide riboside prevents muscle, neural and menalocyte stem cell senescence. Increased muscular regeneration in mice has been observed after treatment with nicotinamide riboside, leading to speculation that it might improve regeneration of organs such as the liver, kidney, and heart. Nicotinamide riboside also lowers blood glucose and fatty liver in prediabetic and type 2 diabetic models while preventing the development of diabetic

peripheral neuropathy.

* Perfluorodecalin is a fluorocarbon, a derivative of decalin in which all of the hydrogen atoms are replaced by fluorine atoms. It is chemically and biologically inert and stable up to 400 °C. Several applications make use of its ability to carry and release oxygen and, it is not ozone depleting as it contains no chlorine or bromine atoms. Fluoroalkanes carry oxygen so well that mammals, including humans, can survive breathing liquid PFC solution, called liquid breathing. PFCs in solution act as an intravascular oxygen carrier to temporarily augment oxygen delivery to tissues. In theory, liquid breathing could assist in the treatment of patients with severe pulmonary or cardiac trauma, especially in pediatric cases. Liquid breathing has also been proposed for use in deep diving and space travel. Perfluorocarbon-based oxygen carriers (PFBOC) are currently a type of 'oxygen-carrying' blood substitute being pursued along with hemoglobin-based oxygen carriers (HBOC). Oxygen therapeutics, even if widely available, would not eliminate the use of human blood, which performs various functions besides oxygen transport. However oxygen therapeutics have major advantages over human blood in various situations, especially trauma. Due to its gas-carrying capacity, perfluorodecalin has been used to enhance oxygen delivery during cell culture. The physiological impact of mounting the specimen in perfluorodecalin is also minimal compared to water. Perfluorodecalin was an ingredient in Fluosol, an artificial blood product developed by Green Cross Corporation in the 1980s. It is also being studied for use in liquid breathing. Perfluorodecalin can be applied topically, to provide extra oxygen to a specific location, to accelerate wound healing. Organs and tissues can be stored for longer in oxygenated perfluorodecalin; the "two-layer method" uses perfluorodecalin and UW solution to preserve tissue for pancreas transplants.

* Phylloquinone, also Vitamin K1, is a fat-soluble vitamin that is stable to air and moisture but decomposes in sunlight. It is found naturally in a wide variety of green plants, particularly leaves, since it functions as an electron acceptor during photosynthesis, forming part of the electron transport chain of Photosystem I. Its best-known function in animals is as a cofactor in the formation of coagulation factors II (prothrombin), VII, IX, and X by the liver. It is also required for the formation of anticoagulant factors protein C and S. It is commonly used to treat warfarin toxicity, and as an antidote for coumatetralyl. Vitamin K is required for bone protein formation.

* RPL-554 is a “first-in-class” drug under development for chronic obstructive pulmonary disease (COPD), asthma, allergic rhinitis, inflammation.and cystic fibrosis. The drug is an inhibitor of the phosphodiesterase 3 (PDE3) and phosphodiesterase 4 (PDE4) enzymes, two enzymes known to be of importance in the development and progression of immunological respiratory diseases. The drug has the potential to act as both a bronchodilator and an anti-inflammatory which would significantly differentiate it from existing drugs.

* Neuralgic amyotrophy is a disease associated with SEPT9 factor (Septin 9), and among its related pathways is Neural Crest Differentiation. Neural crest cells are a temporary group of cells unique to vertebrates that arise from the embryonic ectoderm

cell layer, and in turn give rise to a diverse cell lineage—including melanocytes, craniofacial cartilage and bone, smooth muscle, peripheral and enteric neurons and glia. Underlying the development of neural crest is a gene regulatory network, described as a set of interacting signals, transcription factors, and downstream effector genes that confer cell characteristics such as multipotency and migratory capabilities. Besides SEPT9 factor, the sound frequencies of the top affiliating proteins in the Neural Crest differentiation pathway are included in the recording -GJB1, MPZ, PMP22.

* SkQ1 is a form of CoQ that is electrophoretically targeted to mitochondria for healing and life extension. Production of reactive oxygen species in mitochondria may contribute to senescence. Reactive oxygen species damage mitochondrial DNA and other important cell component, leading to gradual impairment of cellular function. Antioxidants may slow this damage. Several studies indicate that SkQ can efficiently protect the cell from oxidative damageStudies show that low concentrations of SkQ1 are promising in treating retinopathies, cataract, uveitis, glaucoma, and some other ocular diseases. Besides, SkQ1 prolonged lifespan, being especially effective at early and middle stages of aging. In mammals, the effect of SkQs on aging was accompanied by inhibition of development of such age-related diseases and traits as cataract, retinopathy, glaucoma, balding, canities, osteoporosis, involution of the thymus, hypothermia, torpor, peroxidation of lipids and proteins, etc. SkQ1 manifested a strong therapeutic action on some already pronounced retinopathies, in particular, congenital retinal dysplasia.

* Tideglusib is a potent, selective and irreversible small molecule non-ATP-competitive GSK-3 inhibitor. Tideglusib is under investigation for multiple applications: Alzheimer's disease and Progressive supranuclear palsy. Tooth repair mechanisms that promotes dentine reinforcement of a sponge structure until the sponge biodegrades, leaving a solid dentine structure. In 2016 it was successfully trialled for permanently filling 0.14mm holes in mouse teeth. Autism spectrum disorders in adolescents.

1.3.1.29 RT-MB-41

https://archive.org/details/Resonant_Therapy-Molecular_Biology_41

Aspirin-VitaminC; Berberine-Metformin; Bimatoprost; Buspirone; CH223191; Collagen Type1-Skin; Collagen Type2-Joints; Collagen Type3-Muscles; Collagen Type4-Organs; Collagen Type5-Hair; CRL-409041; Deslorelin; Dirlotapide; DMB; GV-1001 Peptide; Hydroxytyrosol; Ibutamoren; Insulin Resistace-Diabetes Reversal; Mecasermin Rinfabate; Mitochondrial Support; Mitochondrial Support2; Mitochondrial Support3; Modafinil; Montelukast; NP213-Fluoride; Omega-3 Fatty Acids; Racetams-Choline; Skin Enhance; Sodium Thiosulfate; SR1-UM729

* Insulin Resistance-Diabetes Reversal. According to sources Adiponectin in combination with Leptin has shown to completely reverse insulin resistance in mice. Hence, the rec

ording plays the sound frequency of Adiponectin and Leptin plus the receptors, Leptin re ceptor and AdipoRon -an agonist of both Adiponectin receptors. It also plays the sound f requency of Sodium Butyrate, a compund that solves the problem of dietary fiber in diet.

* ADIPOQ-AdipoRon-LEP-LEPR-Sodium Butyrate. Adiponectin is a protein hormone wh ich is involved in regulating glucose levels as well as fatty acid breakdown. The hormon e plays a role in the suppression of the metabolic derangements that may result in type 2 diabetes, obesity, atherosclerosis, non-alcoholic fatty liver disease (NAFLD) and an in dependent risk factor for metabolic syndrome. Adiponectin exerts some of its weight red uction effects via the brain. This is similar to the action of leptin; adiponectin and leptin c an act synergistically.

* AdipoRon is an agonist of the adiponectin receptor 1 (AdipoR1) and adiponectin recep tor 2 (AdipoR2). It activates AMPK and PPARalpha signaling and ameliorates insulin res istance, dyslipidemia, and glucose intolerance in db/db mice (an animal model for type II diabetes and obesity). In addition, adiponectin has recently been elucidated to mediate t he antidepressant, anxiolytic, and neurogenic effects of physical exercise. Dysregulation of adiponectin expression has also been implicated in the pathology of mood disorders, anxiety disorders, eating disorders, neurodegenerative disorders, and various other neu ropsychiatric disorders. Also, it has been determined that exercise improves insulin resis tance via activation of AdipoR1. As such, adiponectin receptor agonists are a highly inte resting therapeutic target for a variety of different conditions. Moreover, it has been sugg ested they could potentially be used as a substitute for exercise to achieve similar physi cal and mental health benefits.

* Leptin is a hormone predominantly made by adipose cells and enterocytes in the small intestine that helps to regulate energy balance by inhibiting hunger, which in turn diminis hes fat storage in adipocytes. In obesity, a decreased sensitivity to leptin occurs (similar to insulin resistance in type 2 diabetes), resulting in an inability to detect satiety despite high energy stores and high levels of leptin. Adiponectin in combination with leptin has b een shown to completely reverse insulin resistance in mice.

* LEPR Leptin Receptor. Leptin acts through the leptin receptor (LEP-R). In hypothalami c neurons, adequate leptin receptor function and subsequent regulation of energy meta bolism and body weight depends on interactions of the receptor with gangliosides in the cell membrane. Variations in the leptin receptor have been associated with obesity and with increased susceptibility to Entamoeba histolytica infections. The db/db mouse is a model of obesity, diabetes, and dyslipidemia wherein leptin receptor activity is deficient because the mice are homozygous for a point mutation in the gene for the leptin recepto r. In db/db mice, induced swimming helped to overcome obesity by upregulating uncoup ling proteins.

* Sodium butyrate reduces insulin-resistance, fat accumulation and dyslipidemia in type-2 diabetic rat. The compound is found in human diet, notably produced in large amounts from dietary fiber in the gut and present in Parmesan cheese and butter. Nevertheless, t he most common source of sodium butyrate in the gut is from consumption of legumes,

which along with fiber have been associated with delayed ** and healthspan. Dietary fib er has many functions in diet, one of which may be to aid in energy intake control and re duced risk for development of obesity. The role of dietary fiber in energy intake regulatio n and obesity development is related to its unique physical and chemical properties that aid in early signals of satiation and enhanced or prolonged signals of satiety. In vivo dat a indicate that orally administered sodium butyrate (SB) improves the intestinal health of humans, and delays the onset of diabetes in rats. SB supplementation has a similar effe ct to wheat bran and guar gum on antioxidant property in diabetic rats.

* Aspirin-Vitamin C. Aspirin is an extremely versatile compound that helps to protect aga inst heart disease and many different kinds of cancer, including colon, lung, breast, pros tate, esophageal and even skin cancers. It can help prevent blood clots known as deep vein thromboses and is as good as warfarin in treating heart failure. Aspirin does have s ome serious risks, however, especially bleeding ulcers that could prove lethal. That is w hy people who take aspirin daily should make sure their physicians are aware of this pra ctice.

* Berberine-Metformin when taken together, Metformin and berberine seem to work syn ergistically for even better glucose control. But diabetics are not the only people who co uld benefit from taking berberine. First, it improves muscle insulin sensitivity, and promot es blood glucose and fatty acid uptake into muscle cells.

* Bimatoprost is a medication used to treat high pressure inside the eye including glauc oma. Specifically it is used for open angle glaucoma when other agents are not sufficien t. It may also be used to increase the size of the eyelashes.

* Buspirone is a human antidepressant drug. It has been shown to be effective in a signi ficant number of cats with elimination (urination or defecation) disorders such as inappro priate urination, especially urine marking and other behavior problems. There is some e vidence that buspirone on its own may be useful in the treatment of hypoactive sexual d esire disorder (HSDD) in women.

* CH223191 significantly reduces obesity and adiposity and ameliorates liver steatosis i n male C57Bl/6J mice fed a Western diet. The AHR with its broad ligand binding specific ity is a promising candidate for a potentially simple therapeutic approach for the preventi on and treatment of obesity and associated complications. (Moyer, Benjamin J. Inhibitio n of the aryl hydrocarbon receptor prevents Western diet-induced obesity. Model for AH R activation by kynurenine via oxidized-LDL, TLR2/4, TGFβ, and IDO1. United States: N. p., 2016. Web. doi:10.1016/J.TAAP.2016.03.011.)

* Collagen types 1 to 5. Collagen refers to a family of proteins that are the primary structural component of connective tissues, such as skin and cartilage. The substance makes up about a third of all the protein in the human body, more than any other type of protein in the body by mass. Collagen is responsible for several biological functions, one of which is to provide structural support in connective tissue, muscle, and skin. Collagen is the protein responsible for skin elasticity. It also plays a role in joint and

bone health. Human bodies create collagen naturally. Over time, however, the production of this protein slows down.

Notes:
-The hydroxylase enzymes to synthetize collagen require vitamin C as a cofactor, a long-term deficiency in this vitamin results in impaired collagen synthesis and scurvy. These hydroxylation reactions are catalyzed by two different enzymes: prolyl-4-hydroxylase and lysyl-hydroxylase. Vitamin C also serves with them in inducing these reactions. In this service, one molecule of vitamin C is destroyed for each H replaced by OH.
-Hydroxyproline is a major component of the protein collagen, comprising roughly 13.5% of mammalian collagen. Hydroxyproline and proline play key roles for collagen stability.
-Use the recordings one at a time for a few days before going to the next.

Type I: skin, tendon, vasculature, organs, bone (main component of the organic part of bone)
-COL1A1 Collagen Type I Alpha 1 Chain
-COL1A2 Collagen Type I Alpha 2 Chain
-Hydroxyproline
-ELN Elastin
-Hydroxytyrosol

Type II: cartilage (main collagenous component of cartilage)
-Colagen 2a1
-Hydroxyproline
-Hydroxytyrosol

Type III: reticulate (main component of reticular fibers), commonly found alongside type I
-COL3A1 Collagen Type III Alpha 1 Chain
-Hydroxyproline
-Hydroxytyrosol

Type IV: forms basal lamina, the epithelium-secreted layer of the basement membrane
-COL4A1 Collagen Type IV Alpha 1 Chain
-COL4A2 Collagen Type IV Alpha 2 Chain
-COL4A3 Collagen Type IV Alpha 3 Chain
-COL4A4 Collagen Type IV Alpha 4 Chain
-COL4A5 Collagen Type IV Alpha 5 Chain
-COL4A6 Collagen Type IV Alpha 6 Chain
-Hydroxyproline
-Hydroxytyrosol

Type V: cell surfaces, hair, and placenta
-COL5A1 Collagen Type V Alpha 1 Chain

-COL5A2 Collagen Type V Alpha 2 Chain
-COL5A3 Collagen Type V Alpha 3 Chain
-Hydroxyproline
-Hydroxytyrosol

* CRL-40941 (also known as fladrafinil and fluorafinil) is a eugeroic closely related to adrafinil and modafinil. It is the bis(p-fluoro) ring-substituted derivative of adrafinil. CRL40941 promotes alertness, attention, wakefulness, positive mood, and other parameters, particularly in the elderly. It also may be used in depression and psychomotor retardation. CRL-40941 was found to produce antiaggressive effects in animals, which adrafinil does not produce.

* Deslorelin is used in veterinary medicine. The deslorelin products are used in veterinary medicine and to promote ovulation in mares as part of the artificial insemination process. It is also used to stabilize high-risk pregnancies, mainly of livestock. Unlike other GnRH agonists, which are mainly used to inhibit luteinizing hormone and follicle-stimulating hormone by their ultimate downregulation of the pituitary gland, Deslorelin is primarily used for the initial flare effect upon the pituitary, and its associated surge of LH secretion. Deslorelin is also used to treat benign prostate hyperplasia in dogs.

* Dirlotapide is an effective pharmaceutical drug developed specifically for overweight and obese dogs to help them lose weight. This drug restrains the release of dietary fats from cells in the intestines into the bloodstream. That is done because the accumulation of fat in these intestinal cells leads to feelings of fullness and decreased appetite. Basically, Dirlotapide is used primarily as an appetite suppressant for dogs on a restricted calorie diet.

* DMB (3,3-Dimethyl-1-butanol) is a structural analog of choline. DMB is found in olive oil, red wine and other foods, has the potential to treat—or even prevent—heart disease. The investigators report that in mice, dietary supplementation with this naturally occurring compound safely inhibited atherosclerosis (plaque buildup in arteries) and significantly lowered production of TMAO (trimethylamine-N-oxide), a heart-harming metabolite derived from gut bacteria. DMB, may help reduce heart attack and stroke risk by altering the activity of gut microbes. Conversely, high intake of lecithin and L-carnitine has been linked to increased risk for atherosclerosis, also known as hardening of the arteries. Gut microbes convert these nutrients into a compound called trimethylamine (TMA), which in turn is converted into TMAO, which accelerates atherosclerosis in animals and is associated with a higher risk for heart disease in people.

* GV1001 is a peptide derived from the human telomerase reverse transcriptase (hTERT) sequence that is reported to have anti-cancer effects. It is also an anti-inflammatory that downregulates the production of pro-inflammatory cytokines through the suppression of p38 MAPK and NF-κB activation following ENO1 stimulation. It was developed as an anti-cancer agent to treat advanced pancreatic cancer, non-small lung

cancer, melanoma, and other cancers. Recent studies have reported that GV1001 penetrates cell membranes by binding with heat shock proteins (HSPs) and accumulates in the cytoplasm. Additionally, this peptide protects against renal ischemia reperfusion injury (IRI) in mice by reducing acute inflammatory responses and decreasing the proportion of apoptotic cells that can cause renal injury. GV1001 possesses neuroprotective effects against Beta amyloid 25–35 oligomer in Neural Stem Cells and these effects are mediated through mimicking the extra-telomeric functions of human telomerase reverse transcriptase, including the induction of cellular proliferation, anti-apoptotic effects, mitochondrial stabilization, and anti-aging and anti-oxidant effects.

* Hydroxytyrosol is a type of phenolic phytochemical with antioxidant properties found in olive leaf and olive oil. Hydroxytyrosol has demonstrated an exceptional capacity for neutralizing free radicals and can be a powerful tool in the fight against oxidative stress and chronic disease. In a study, Hydroxytyrosol has been shown to double vitamin C levels in blood.

* Ibutamoren or MK-677 is a potent, long-acting, orally-active, selective, and non-peptide agonist of the ghrelin receptor and a growth hormone secretagogue, mimicking the growth hormone (GH)-stimulating action of the endogenous hormone ghrelin. It has been shown to increase the secretion of several hormones including GH and insulin-like growth factor 1 (IGF-1) and produces sustained increases in the plasma levels of these hormones without affecting cortisol levels.

Ibutamoren has been shown to sustain activation of the GH–IGF-1 axis and to increase lean body mass with no change in total fat mass or visceral fat. It is under investigation as a potential treatment for reduced levels of these hormones, such as in children or elderly adults with growth hormone deficiency, and human studies have shown it to increase both muscle mass and bone mineral density, making it a promising potential therapy for the treatment of frailty in the elderly.

* Mecasermin rinfabate also known as rhIGF-1/rhIGFBP-3, is a drug consisting of recombinant human insulin-like growth factor 1 (IGF-1) and recombinant human insulin-like growth factor binding protein-3 (IGFBP-3) which is used for the treatment of amyotrophic lateral sclerosis (Lou Gehrig's disease). It is similar in action to mecasermin, but with fewer side effects (such as hypoglycemia). Treatment with rhIGF-I has been explored in a number of growth and endocrine disorders. The effects of Mecasermin rinfabate have been explored in a number of clinical situations including diabetes, severe insulin resistance, osteopaenia, burns and growth hormone insensitivity syndrome. For the treatment of IGF-I deficiency, it is desirable to administer IGF-I bound to IGFBP-3 to maintain the normal equilibrium of these proteins in the blood. Mecasermin rinfabate (rhIGF-I/rhIGFBP-3) mimics the effects of the natural protein complex in the bloodstream and would augment the natural supply of these linked compounds.
The most advanced indication in development of mecasermin rinfabate is the treatment of severe growth disorders due to growth hormone insensitivity syndrome (GHIS), also called Laron syndrome. GHIS is a genetic condition in which patients do not produce

adequate quantities of IGF because of a failure to respond to the growth hormone signal. This results in a slower growth rate and short stature. Mecasermin rinfabate also has potential as replacement therapy for IGF-I, which may become depleted in indications such as major surgery, organ damage/failure, traumatic injury, cachexia and severe burn trauma. It also has potential for the treatment of osteoporosis.

* Mitochondrial support. The recordings include but are not limited to products: Butyrate, Glutathione, Nicotinamide riboside, Creatine monohydrate, Acetyl-L-Carnitine, CoQ10
-Butyrate - for cellular health and mitochondria are clear
-Glutathione protect and support the mitochondria
- Nicotinamide riboside - converts into NAD+, which is said to have powerful mitochondrial effects that impact longevity and anti-aging
-Creatine monohydrate - to increase cellular ATP. More energy seems to indicate more ability to do “work” that leads to decreased fatigue, increased neuron growth, and drastically improved cognitive performance especially in vegans and vegetarians
-Acetyl-L-Carnitine - can support protecting mitochondria and preventing damage, but other evidence suggests it can help produce more energy when oxygen is scarce
- Acetyl-L-carnitine and CoQ10 - are essential molecules for producing energy in the body and promoting health of the mitochondria, known as the "powerhouse" of the cell

* Modafinil is used for narcolepsy, shift work sleep disorder and obstructive sleep apnea/hypopnea. Modafinil enhances short-term memory allowing users to stay awake for long periods of time. It is sometimes used for performance enhancement by military pilots and soldiers during combat situations, and some now call it a "super drug". Its off-label uses have contributed to an ongoing debate on how far to push the human body through the use of drugs.

* Montelukast is used to prevent wheezing, difficulty breathing, chest tightness, and coughing caused by asthma in adults and children 12 months of age and older. Montelukast is also used to prevent bronchospasm (breathing difficulties) during exercise in adults and children 6 years of age and older. Montelukast is also used to treat the symptoms of seasonal (occurs only at certain times of the year), allergic rhinitis (a condition associated with sneezing and stuffy, runny or itchy nose) in adults and children 2 years of age and older, and perennial (occurs all year round) allergic rhinitis in adults and children 6 months of age and older. Montelukast is in a class of medications called leukotriene receptor antagonists (LTRAs). It works by blocking the action of substances in the body that cause the symptoms of asthma and allergic rhinitis.

* NP213-fluoride. Novexatin (NP213) is an antifungal compound that has been proposed to function by destabilizing membranes, it is a circular hepta-arginine peptides. This is the first fungal infection therapy of the toenail to address both the underlying cause of the condition and the cosmetic issues associated with the infection; by rapidly killing the causative fungi and rapidly improving the nail’s appearance. Growth curves confirm that Novexatin has MIC values for fungi that are high relative to

most commercial antifungal compounds. Fluoride has long been known to inhibit bacterial and fungal cell growth most likely by blocking the functions of key metabolic enzymes. Antifungal compounds that disrupt cell membrane integrity exhibit improved ability to inhibit cell growth when used with fluoride.

* Omega-3 fatty acids foster the development of brain circuitry and the speedy processing of information. They also play important roles in stabilizing mood and staving off cognitive decline. Low levels of omega-3s are linked to poor memory and depressive mood. Omega-3 fats are also critical for the formation of anti-inflammatory molecules in the body that protects against pain and disorders like arthritis and joint problems. Omega-3s might be involved: cardiovascular disease and its risk factors; infant health and neurodevelopment; cancer prevention; Alzheimer's disease, dementia, and cognitive function; age-related macular degeneration; dry eye disease; rheumatoid arthritis; and other conditions. In pets, omega-3 fatty acids may also help to promote weight loss.

* Racetams-choline. Racetams are a class of drugs that share a pyrrolidone nucleus. Some, such as piracetam, are considered nootropics. Some such as aniracetam, oxiracetam, pramiracetam and phenylpiracetam are also nootropics. Racetams work in large part by modulating the release of acetylcholine, the neurotransmitter most closely associated with cognition. Racetams do not create more acetylcholine themselves, but they do stimulate acetylcholine receptor sites, which in turn stimulates the production of more of this crucial neurotransmitter. Choline is the precursor of acetylcholine, a crucial building block that's absolutely necessary to its production. The recording includes a few nootropic racetams.

* Skin Enhance is a recording which features TT2 peptide, Hyaluronic acid and Peptamide 6.
-T2 showed positive and significant effects on signs of aging in two in vivo studies, including reducing the appearance of skin sagging and slacking, and improving firmness, elasticity and visco-elasticity in volunteers treated with the peptide formulation.
-Hyaluronic acid is a naturally occurring polysaccharide (carbohydrate) in the human body. It is present in large amounts in the spaces between skin cells, where it provides moisture, plumpness, firmness and suppleness to the skin.
-Peptamide 6 is a firming peptide that increases collagen synthesis and upregulates growth factors, transmembrane, matrix and heat shock proteins.

* Sodium Thiosulfate has a role as an antidote to cyanide poisoning, a nephroprotective agent an antifungal drug and hangover remedy. Sodium thiosulfate absorbs alcohol, preventing intoxication. The substance is used to cure alcoholism – long-term use of it makes a person develop an aversion to alcohol.

* SR1-UM729. SR1 StemRegenin is an Aryl hydrocarbon receptor (AHR) antagonist. It promotes ex vivo expansion of CD34+ human hematopoietic stem cells and the generation of CD34+ cells. UM729 367.443 enhances the self-renewal of human hematopoietic stem cells in vitro. UM729 does not inhibit the aryl hydrocarbon receptor

(AHR) pathway, but has been shown to collaborate with AHR antagonists in preventing differentiation of acute myeloid leukemia (AML) cells in culture. UM279·enhances human hematopoietic stem cell self-renewal in vitro. According to cancer research, UM729 collaborates with StemRegenin 1 (SR1) in preventing differentiation of AML cells in culture.

1.3.1.30 RT-MB-42

https://archive.org/details/Resonant_Therapy-Molecular_Biology_42

ABT-737; ACE-083; ACT-1 Peptide; Adenosine 5'-monophosphate disodium salt; AH90 Peptide; AS1842856; AXT107 Peptide; Berberine; Bromantane; Caffeine-L-Theanine; C HCHD10 Factor; Chlorine Dioxide; CRL-409040; Dulaglutide; H1a Peptide; Hydroxypyri dinone; Hydroxytyrosol-Rutin; Insect Repellent Mix; Magnoloside-A; Migraine-Balance-V ertigo; MTHFR Factor; Pandemic Viral Infection; Peptide-6; Ponericin-G1 Peptide; PQ Q-CoQ10; RCGD423; SP-H5 Peptide; Tiger17 Peptide; UK5099; ZXR-2 Peptide

* ABT-737 is a small molecule drug that inhibits Bcl-2 and Bcl-xL, two members of the B cl-2 family of evolutionarily-conserved proteins that share Bcl-2 Homology (BH) domains. First developed as a potential cancer chemotherapy, it was subsequently identified as a senolytic (a drug that selectively induces cell death in senescent cells). ABT-737 exhibit s anticancer chemotherapeutic and antithrombotic activities. ABT-737 is currently in clini cal trials as one component of a combination therapy in the treatment of various cancer s such as acute myelogenous leukemia (AML). This compound inhibits growth of AML c ells in vitro and increases survival rates and lifespan in animal models of AML. In vitro, A BT-737 induces mitochondrial membrane depolarization in platelets, inducing apoptosis and clearance.

* ACE-083 is a locally acting follistatin-based therapeutic that binds myostatin and other muscle regulators and has been shown to increase muscle mass and force in neuromus cular disease mouse models. In humans, ACE-083 was well tolerated and resulted in si gnificant targeted muscle growth. ACE-083 may have the potential to increase muscle mass in a wide range of neuromuscular disorders.

* ACT1 peptide is a new compound that could shield heart tissue before a heart attack, as well as preserve healthy cells when administered after a heart attack. AlphaCT1, also has other unexpected and beneficial effects, particularly in relation to skin wound healin g -it helps reduce inflammation and heal chronic wounds such as diabetic foot ulcers.

* Adenosine 5′-monophosphate disodium salt is clinically used for disseminated sclerosis, porphyria, itching, liver disease, varicose ulcer complications. Compound eye drops containing mainly AMP can be used for the corneal surface diseases of asthenopia, central retinitis,pannus and herpes. This product can be used as nutrition enhancer. It can be added to the milk to increase the amount of nucleotides ,make them

closer to human milk ingredients ,so as to enhance infant’s resistance against bacterial diseases.

* AH90 peptide is a potential wound healing-promoting peptide was identified from the frog skin of Odorrana grahami. It showed potential wound healing-promoting activity in a murine model with full thickness dermal wound. AH90 promoted release of transforming growth factor beta1 through activation of nuclear factor-kappaB and c-Jun NH2-terminal kinase mitogen-activated protein kinases signaling pathways, while inhibitors of nuclear factor-kappaB and c-Jun NH2-terminal kinase inhibited the process. In addition, the effects of AH90 on Smads family proteins, key regulators in transforming growth factor beta1 signaling pathways, could also be inhibited by transforming growth factor beta1 antibody. Altogether, this indicated that AH90 promoted wound healing by inducing the release of transforming growth factor beta1.

* AS1842856. Excessive hepatic glucose production through the gluconeogenesis pathway is partially responsible for the elevated glucose levels observed in patients with type 2 diabetes mellitus (T2DM). The forkhead transcription factor Foxo1 plays a crucial role in mediating the effect of insulin on hepatic gluconeogenesis. A Foxo1 inhibitor, an orally active low-molecular compound, as a therapeutic drug for treating T2DM. AS1842856 potently inhibits human Foxo1 transactivation and reduces glucose production through inhibition of G6Pase and PEPCK mRNA levels in a rat hepatic cell line. Oral administration of AS1842856 to diabetic db/db mice led to a drastic decrease in fasting plasma glucose level via inhibition of hepatic gluconeogenic genes, whereas administration to normal mice had no effect on fasting plasma glucose level. Treatment with AS1842856 also suppressed an increase in plasma glucose level caused by pyruvate njection in both normal and db/db mice. Taken together, these findings indicate that the Foxo1 inhibitor represents a new class of drugs for use in treating T2DM. AS1842856 attenuates the development of asthmatic lung inflammation, it also induces a significant decrease of tumor load in all critical organ compartments and increases the life span of the animals when administrated at anti-diabetic concentrations.

* AXT107 is a new peptide which holds promise for improving treatment for degenerative retinal diseases, such as age-related macular degeneration, diabetic macular edema and diabetic retinopathy. These vascular diseases often result in central vision loss as blood vessels grow into tissues at the back of the eye, where such growth should not occur.

* Berberine is an alkaloid from Hydrastis canadensis L. Berberidaceae. It is also found in many other plants. It is relatively toxic parenterally, but has been used orally for various parasitic and fungal infections and as antidiarrheal. Berberine is an organic heteropentacyclic compound, an alkaloid antibiotic, a botanical anti-fungal agent and a berberine alkaloid. It has a role as an antilipemic drug, a hypoglycemic agent, an antioxidant, a potassium channel blocker, and antineoplastic agent.

* Bromantane is an atypical psychostimulant and anxiolytic drug of the adamantane family related to amantadine and memantine which is used in Russia in the treatment of

neurasthenia. Although the effects of the bromantane have been determined to be dependent on the dopaminergic and possibly serotonergic neurotransmitter systems, its exact mechanism of action is unknown, and it is distinct in its properties relative to typical psychostimulants such as amphetamine. Because of its unique aspects, bromantane has sometimes been described instead as an adaptogen and actoprotector. Asthenia is a term used by the medical community to refer to weakness. It is a psychopathological condition characterized by extreme acute or chronic loss of strength. This condition may lead to sleep disturbances, fatigue, or lack of energy as well as hyperesthesia, which is an extreme sensitivity of the skin. Bromantane is described primarily as a mild psychostimulant and anxiolytic. It is also said to possess antiasthenic properties. Bromantane is reported to improve physical and mental performance, and hence could be considered a performance-enhancing drug.

* Caffeine and L-Theanine. The caffeine will help to promote alertness, attention and wakefulness, but the L-theanine helps to mitigate many of the negative side effects of caffeine. More importantly, there seems to be a synergy that allows you to focus on your tasks a lot better.

* CHCHD10 factor-related disorders include Frontotemporal dementia and/or amyotrophic lateral sclerosis 2 (FTDALS2) is a neurodegenerative disorder with high intrafamilial variation with phenotypes such as frontotemporal dementia and/or amyotrophic lateral sclerosis. Frontotemporal dementia is characterized by frontal and temporal lobe atrophy associated with neuronal loss, gliosis, and dementia. Patients exhibit progressive changes in social, behavioral, and/or language function. Amyotrophic lateral sclerosis is characterized by the death of motor neurons in the brain, brainstem, and spinal cord, resulting in fatal paralysis. Spinal muscular atrophy, Jokela type (SMAJ) is an autosomal dominant, slowly progressive, lower motor neuron disease. SMAJ is characterized by adult- onset of muscle cramps and fasciculations affecting the proximal and distal muscles of the upper and lower limbs. The disorder results in weakness and mild muscle atrophy later in life. Myopathy, isolated mitochondria l, autosomal dominant (IMMD) is a mitochondrial myopathy presenting with severe exercise intolerance, progressive proximal weakness, and lactic acidemia. The disorder is slowly progressive, with later involvement of facial muscles, muscles of the upper limbs, and distal muscles. Mutations in CHCHD10 has also been found to be associated with cerebellar ataxia, frontotemporal dementia (FTD), and other mitochondrial diseases.

* Chlorine dioxide is a relatively simple remedy to heal various diseases. Chlorine dioxide attacks microbes and parasites. But it doesn’t go against the bacteria which we need for our own life. After the input into our body no poisonous residues are left behind. Chlorine dioxide kills pathogens on food and in the human body with oxygen. The only thing which is left over is a small amount of salt. Chlorine dioxide is also applied to sterilize red blood cells. Doing this it was possible to kill several HIV-1 cells. It can be used to cure almost any infectious disease including malaria, dengue, herpes, AIDs, and more. Like ozone and chlorine, chlorine dioxide is an oxidizing biocide and not a metabolic toxin. This means that chlorine dioxide kills microorganisms by

disruption of the transport of nutrients across the cell wall, not by disruption of a metabolic process. Chlorine dioxide is a molecule which is being suggested for use against infections and cancer which are associated with microbes. This includes melanoma, squamous cell carcinoma, and breast cancer.

* CRL-40940 or Flmodafinil is one of the newest nootropic supplements based on the popular nootropic supplement, Modafinil. It has most of the same side effects and main effects associated with Modafinil. It can be used when the point is in staying awake for a comparatively long period of time. This is a supplement that really gives people a lot of energy, so it's a good one for the people who are planning on staying awake all night long. If they're just after a short-term boost and they still want to be able to go to sleep shortly afterward, than Flmodafinil might not be the best choice. This is going to keep people awake for much longer than a few hours. Often times, people can't really get themselves to study or to complete a project well before the deadline because they have a difficult time pushing themselves to work. This could be due to a general lack of energy, or it could be due to the fact that a lot of people are suffering from emotional blocks that are preventing them from working. Taking Flmodafinil manages to remove or diminish a lot of those emotional blocks, giving people significantly more energy and allowing them to finish all of their projects.

* Dulaglutide binds to glucagon-like peptide 1 receptors, slowing gastric emptying and increases insulin secretion by pancreatic Beta cells. Simultaneously the compound reduces the elevated glucagon secretion by inhibiting alpha cells of the pancreas, which is known to be inappropriate in the diabetic patient. GLP-1 is normally secreted by L cells of the gastrointestinal mucosa in response to a meal. The compound is indicated for adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control. Dulaglutide is not indicated in the treatment of subjects with type 1 diabetes mellitus or patients with diabetic ketoacidosis because these problems are the result of the islet cells being unable to produce insulin and one of the actions of Dulaglutide is to stimulate functioning islet cell to produce more insulin. Dulaglutide can be used either stand-alone or in combination with other medicines for type 2 diabetes, in particular metformin, sulfonylureas, thiazolidinediones, and insulin taken concomitantly with meals.

* H1a is a double-knot spider-venom peptide that inhibits acid-sensing ion channel 1a. Inhibition of these channels using a "double-knot" spider venom peptide massively attenuates brain damage after stroke and improves behavioral outcomes, even when the peptide is administered 8 h after stroke onset. Intracerebroventricular administration to rats of a single small dose of H1a (2 ng/kg) up to 8 h after stroke induction by occlusion of the middle cerebral artery markedly reduced infarct size, and this correlated with improved neurological and motor function, as well as with preservation of neuronal architecture. Inhibition of ASIC1a using H1a provides exceptional levels of neuroprotection even when the peptide is administered up to 8 h after stroke onset. Along with facilitating a substantially reduced level of penumbral damage. H1a is unique in providing some protection of the striatal core region, which is generally considered therapeutically unrecoverable owing to rapid and irreversible necrotic cell death.

Importantly, we have shown that the reduction in infarct volume in H1a-treated animals translates to improved behavioral outcomes, with a marked decrease in neurological deficits and motor impairment. We observed no adverse effects during the 72-h observation period following i.c.v. administration of H1a, consistent with previous work showing that central or peripheral administration of ASIC inhibitors does not produce unwanted side effects. Thus, H1a is a powerful pharmacological tool for probing the role of ASIC1a in acid-mediated neuronal injury and various neurological disorders, and a promising lead for the development of therapeutics to protect the brain from ischemic injury.

* Hydroxypyridinone is a molecule used in a type of therapy known as chelation, in which specific molecules are used to remove heavy metals like mercury or, in this case, uranium from the bloodstream. This particular chelating agent removed roughly 80 percent of the residual uranium in the kidneys of exposed mice, while 50 percent of the residual radioactive material was extracted from the animals’ bones, with minor adverse effects.

* Rutin helps the body utilize vitamin C and produce collagen (skin's main building blocks), can be used to treat conditions such as hemorrhoids and high blood pressure (hypertension), and can also reduce cholesterol levels. Rutin can be very helpful in treating strained blood vessels in such conditions as hemorrhoids due to rutin's ability to maintain capillary flexibility and strength. The capillaries are the smallest blood vessels in the body, and when they get strained in the anal region due to overweight or pregnancy, having chronic diarrhea or constipation, or other reasons, the results are swollen blood vessels, or hemorrhoids. Rutin is considered to be an antioxidant, meaning that it binds to damaging free radicals in the body and neutralizes them. Free radicals turn LDL cholesterol into plaques, which in turn can block arteries and prevent normal blood flow (a condition known as atherosclerosis). Blocked arteries can lead to such cardiovascular conditions as hearth disease and stroke. Rutin can also be used to treat Meniere's disease, a condition that causes ringing in the ears (tinnitus), dizziness and intermittent hearing loss. Hydroxytyrosol has demonstrated an exceptional capacity for neutralizing free radicals and can be a powerful tool in the fight against oxidative stress and chronic disease. In a study, Hydroxytyrosol has been shown to double vitamin C levels in blood.

* Insect repellent frequencies mix consists of the molar masses of four chemicals, Thymol, Citral, Citronellal, and Citronellol known for their pest-repellent, antiseptic, antibacterial, antifungal, and vermifuge properties.

* Magnoloside A ameliorates functional dyspepsia by modulating brain-gut peptides and gut microbiota. It also exhibits potent antifungal activities against various Cryptococcus strains.

* Migraine, balance, vertigo. Erenumab-Galcanezumab-Fremanezumab are three antagonists of the calcitonin gene-related peptide receptor (CGRPR) for the prevention of migraine. They are monoclonal antibodies to block the receptors for the protein

CGRP, thought to play a major role in starting migraines.

* MTHFR factor is a gene that holds the recipe for methylenetetrahydrofolate reductase – an enzyme that helps our bodies convert vitamin B9 (also known as folate) into a usable form called methylfolate. This process is called methylation. When the MTHFR gene is functioning properly, it's highly efficient at helping our bodies convert vitamin B9 (folate) into methylfolate. When the gene is mutated, this capacity to convert vitamin B9 into methylfolate is reduced by 40-70%. That's HUGE, because converting folate into a useable form is essential for DNA synthesis and repair, neurotransmitter production, detoxification, and immune function.

* Pandemic Viral Infection presents products related to viral epidemics. 3m RNA Polymerase inhibitor - Favipiravir NS3/4A Protease inhibitor - Simeprevir RNA Synthesis inhibitor - Tarbavirin 3m Reverse Transcriptase inhibitor - Racivir Reverse Transcriptase inhibitor - Efavirenz Reverse Transcriptase inhibitor - Tenofovir 3m Entry inhibitor - VIR-576 peptide NS5B inhibitor - Sofusbuvir RSV Prevention - Palivizumab 3m Antiviral - Galidesivir Immunomodulator - Alfacon-1 Monoclonal Antibody - Bavituximab 3m Antiviral - Remdesivir Antiretroviral Protease inhibitor - Saquinavir Improved Saquinavir absorption - Omeprazole 3m Antiretroviral - Lopinavir Antiretroviral - Ritonavir Protease inhibitor - Indinavir 3m Antibiotic Immunosuppresive - Myriocin Immunosuppressive - Mycophenolic acid Immunosuppressive - Sirolimus

* Peptide 6 enhances neurogenesis in a mouse model of mild to moderate Traumatic Brain Injury. Chronic administration of this molecule resulted in recovery of dendritic density and synaptic loss and activation of the traditional tri-synaptic memory pathway in the hippocampus of injured mice. This also resulted in improvement in memory on behavioral testing. The fact that this molecule is neurogenic and is given peripherally and non-invasively demonstrates its potential in hippocampal regeneration in the post-traumatic brain. Available data further emphasizes the role of neurotrophic factor supplementation in TBI and makes a strong case for neurotrophic factor-based novel therapies for the injured hippocampus.

* Ponericin-G1 peptide is derived from Pachycondyla goeldii ant venom. Presents broad antibacterial and antifungal spectrum. Has marked insecticidal and non-hemolytic activities.

* PQQ-CoQ10. Pyrroquinoline quinone or PQQ is a synthetic molecule. There is some evidence in a most compelling study that showed PQQ and CoQ10 could improve verbal memory performance whereas either alone could not. PQQ and CoQ 10 promote antioxidant activity and mitochondrial health through different mechanisms, providing multifunctional support for cardiovascular health and neuroprotection. PQQ is an ideal complement to CoQ10 because PQQ stimulates the growth and replication of those same mitochondria. More mitochondria with more spark means even more energy.

* RCGD423 activates a cellular signaling pathway called JAK-Stat, which transmits information from outside the cell to the nucleus of the cell. The research showed that

JAK-Stat activation leads to the increased production of lactate and this in turn drives hair follicle stem cell activation and quicker hair growth. RCGD423 also promotes cartilage growth while also stopping the inflammation that leads to cartilage degeneration.

* SP-H5 is a bioactive peptide that coats tooth surfaces, helping prevent new cavities and heal existing ones in lab experiments.

* Tiger17 peptide greatly diminished wound closure time in a full-thickness skin wound mouse model, and the peptide was involved in three stages of wound-healing: (i) the inflammatory stage, by recruiting macrophages to the wound site; (ii) re-epithelialization and granulation tissue formation, by promoting proliferation and migration of both keratinocytes and fibroblasts; and (iii) the tissue remodeling phase, by activating mitogen-activated protein kinases signaling pathways and by stimulating the release of interleukin 6 and transforming growth factor beta1 in murine macrophages. Altogether, these results clearly indicate Tiger17 as a promising wound-healing lead.

* UK5099 blocks pyruvate from entering the mitochondria, which forces the production of lactate in the hair follicle stem cells and accelerates hair growth in mice.

* ZXR-2 is a designed antimicrobial peptide represents a potential therapeutic for the prevention and treatment of dental caries. Dental caries, a highly prevalent oral disease, is primarily caused by pathogenic bacteria infection, and most of them are anaerobic. ZXR-2 showed broad-spectrum activity against a variety of Gram-positive and Gram-negative oral bacteria, particularly the caries-related taxa Streptococcus mutans. ZXR-2 killed most bacterial cells within 5 min at 4 × MIC. The mechanism of ZXR-2 involved disruption of cell membranes, as observed by scanning electron microscopy. Moreover, ZXR-2 inhibited the formation of S. mutans biofilm, but showed limited hemolytic effect.

1.3.1.31 RT-MB-43

https://archive.org/details/Resonant_Therapy-Molecular_Biology_43

2-Mercaptoethanol; Adapalene; AGO4 Factor; Ambroxol; Azithromycin; Bemethyl; Body Cooling Mix; Bupicomide; Bupropion; CCG-203971; Cibinetide; CLP-290; Cogpep Peptide; Covid-19 Prevention; Covid-19 Vaccine; Cryosim-3; Dependency And Avoidance Of Withdrawal; Desquamation Regulation; Disulfiram; Emoxypine; Halicin; Heat Rash Mix; Irritable Male Syndrome; Lanthionine ketimine; Norepinephrine; Skin Homeostasis; Skin Moisture; Testosterone-Growth Hormone; TIK-301; XIB- 4035

* 2-Mercaptoethanol. The drug disulfiram (see below) prevents the oxidation of acetaldehyde to acetic acid and is used in the treatment of alcoholism. Disulfiram activity can be reversed by treatment with 2 mercaptoethanol, although not with glutathione. ALDH1 is strongly inhibited by disulfiram, while ALDH2 is resistant to its effect. The cysteine residue at 302 in ALDH1 and 200 in ALDH2 is implicated as a disulfiram binding site on the e

nzyme and serves as a disfulfiram sensitive thiol site. Covalent binding of disulfiram to t he thiol blocks the binding of one of the cysteine residues with iodoacetamide, thereby i nactivating the enzyme and significantly lowering catalytic activity.

* Adapalene is a third-generation topical retinoid primarily used in the treatment of mild-moderate acne, and is also used off-label to treat keratosis pilaris as well as other skin c onditions. It is effective against acne conditions where comedones are predominant. Ad apalene has the unique ability to inhibit keratinocyte differentiation and decrease keratin deposition. This property makes adapalene an effective treatment for keratosis pilaris an d callus. It may be used by men undergoing foreskin restoration to reduce excess kerati n that forms a layer on the exterior of the human penis after circumcision. Other non-FD A approved indications that have been reported in the literature include treatment of verr uca vulgaris, molluscum contagiosum, Darier disease, photoaging, pigmentary disorder s, actinic keratoses and alopecia areata. A study has concluded that adapalene gel 0.1 % under occlusion is an effective, safe and easy to use treatment for plantar warts and may help clear lesions faster than cryo-therapy.

* AGO4 factor encodes the protein argonaut 4. The protein is directly related to mammal cellular sensitivity to viral infection. Mass General researchers have recently uncovered this novel potential antiviral drug target that could lead to treatments protecting against a host of infectious diseases – creating a universal treatment. Their work suggests that the protein Argonaute 4 (AGO4) is an “Achilles heel” for viruses. Researchers suggest that boosting levels of AGO4 could shore up the immune system to protect against multiple viruses. When working with mice, the researchers found that only AGO4-deficient cells were hypersensitive to infections, such as the influenza virus - more commonly known as the flu.

* Ambroxol acts on mucus membranes, restoring the physiological clearance mechanisms of the respiratory tract (which play an important role in the body’s natural defence mechanisms) through several mechanisms, including breaking up phlegm, stimulating mucus production, and stimulating synthesis and release of surfactant by type II pneumocytes. Surfactant acts as an anti-glue factor by reducing the adhesion of mucus to the bronchial wall, in improving its transport and in providing protection against infection and irritating agents. Ambroxol is a potent inhibitor of the neuronal Na+ channels. Many state-of-the-art clinical studies have demonstrated the efficacy of ambroxol in relieving pain in acute sore throat, with a rapid onset of action, with its effect lasting at least three hours. Ambroxol is also anti-inflammatory, reducing redness in a sore throat. Ambroxol has recently been shown to increase activity of the lysosomal enzyme glucocerebrosidase. Because of this it may be a useful therapeutic agent for both Gaucher disease and Parkinson's disease. It was also recently shown that ambroxol triggers exocytosis of lysosomes by releasing calcium from acidic cellular calcium stores. This occurs by diffusion of ambroxol into lysosomes and lysosomal pH neutralization. This mechanism is most likely responsible for the mucolytic effects of the drug, but may also explain the reported activity in Gaucher and Parkinson's disease. Both ambroxol and its parent drug bromhexine have been shown to induce autophagy in several cell types, and ambroxol was shown to potentiate rifampicin therapy in a

model of tuberculosis through host directed effects. Ambroxol also enhances lung levels of a wide range of antibiotics.

* Azithromycin is an antibiotic used for the treatment of a number of bacterial infections. This includes middle ear infections, strep throat, pneumonia, traveler's diarrhea, furuncles and other intestinal infections. It can also be used for a number of sexually transmitted infections, including chlamydia and gonorrhea infections. Common side effects include nausea, vomiting, diarrhea and upset stomach. Azithromycin is an azalide, a type of macrolide antibiotic. Azithromycin prevents bacteria from growing by interfering with their protein synthesis. It binds to the 50S subunit of the bacterial ribosome, thus inhibiting translation of mRNA. Nucleic acid synthesis is not affected.

* Bemethyl is a synthetic actoprotector which is also antihypoxant (combating conditions of hypoxia), antioxidant, and antimutagenic. Bemethyl is primarily classified as an actoprotector; a synthetic adaptogen with significant capacity to increase physical performance. Bemethyl reduces anxiety, stress and prevents fear; these properties improve performance in extreme conditions. People with asthenic disorders (excessive fear, anxiety. and obsessive compulsions) and healthy adults alike can influence their capacity for physical work.Bemethyl also has a positive effect on metabolic processes, allowing adaptation to conditions causing frequent hypoxia, and the obtained effect is long-lasting and also occurs after the end of dosage. Bemethyl has been shown to preserve both physical and mental capacity in high-altitude, low-oxygen environments, particularly by its effect in helping control excess serum levels of cholesterol and bilirubin, which are known to have negative effects especially during adjustment to high-altitude environments. Bemethyl has also been shown to prevent permanent hearing loss and facilitate recovery of hearing after mine-explosion trauma, when treatment is initiated immediately after injury. In one study, bemethyl was shown to prevent the mutagenic effect of white asbestos in mice and in cultured human whole blood. A study using mice showed bemethyl to reduce mutatation induced by certain mutagenic drugs. Another study using cells from human donors showed Bemethyl to be anticlastogenic (able to minimize chromosome breakages).

* Body Skin Cooling is a mix of cooling agents WS12, WS5 and L-Menthyl Lactate. Transient receptor potential melastatin-8 (TRPM8), a cationic ion channel is involved in detection of normal cooling- sensation in mammals. TRPM8 agonists act as cooling agents. TRPM8 activation by cooling or chemical agonists have been shown to produce profound, mechanistically novel analgesia in chronic pain states such as neuropathic pain in rodents. TRPM8 or a closely related protein in epidermal keratinocytes plays a role in epidermal permeability barrier homoeostasis and epidermal proliferation after barrier insult.

* Bupicomide is a chemical compound used experimentally as a beta blocker and clinically as a strong vasodilator with the noted side effects of reduced systolic, diastolic and mean arterial pressure. As the result of the screening program examining microbial fermentation products for pharmacological activity (other than antibiotic activity), fusaric acid was isolated from Fusarium oxysporum following the discovery that extracts were

potent inhibitors of Dopamine beta-hydroxylase (DBH), and thus interfered with the biosynthesis of the pressor neurohormone, norepinephrine. To refine this lead, amidation via the acid chloride was carried out to give antihypertensive analog bupicomide.

* Bupropion is a medication primarily used to treat major depressive disorder and to support stopping smoking. It is an effective antidepressant on its own, but is also used as an add-on medication in cases of incomplete response to first-line SSRI antidepressants. Bupropion is taken in tablet form and is available only by prescription in most countries. Common side effects include dry mouth, trouble sleeping, agitation, and headaches. Serious side effects include an increased risk for epileptic seizures and suicide. The risk of seizures caused the drug to be withdrawn from the market for some time and then the recommended dose to be reduced. In comparison to some other antidepressants, it does not cause as much sexual dysfunction or sleepiness, and may result in weight loss. It is unclear if use during pregnancy or breastfeeding is safe. Bupropion is an atypical antidepressant. It acts as a norepinephrine–dopamine reuptake inhibitor (NDRI) and a nicotinic receptor antagonist. Chemically, bupropion is an aminoketone that belongs to the class of substituted cathinones and is similar to phenethylamines.

* CCG-203971 reduces the migration of melanoma cells by 85 to 90%. The small-molecule drug compound goes after a gene’s ability to produce RNA molecules and certain proteins in melanoma tumors. This gene activity causes the disease to spread but the compound can shut it down. It is an antifibrotic agent; inhibits fibrosis by targeting the MRTF/SRF gene transcription pathway. Selectively inhibits proliferation of SSc-derived dermal fibroblasts but not that of normal fibroblasts. Inhibits expression of CTGF, alpha-SMA, and COL1A2 in SSc fibroblasts as well as in LPA and in TGFbeta-stimulated fibroblasts. Prevents bleomycin-induced skin thickening and collagen deposition in vivo. Also suppresses PC-3 cell migration in scratch wound assays.

* Cibinetide is an experimental drug developed to treat sarcoidosis induced small fiber neuropathy. It also improves metabolic control and neuropathic symptoms in patients with type 2 diabetes.

* CLP290 reactivates dormant nerves and, restores inhibition in injured spinal cord which leads to functional recovery. CLP290 is known to activate a protein called KCC2, found in cell membranes, which transports chloride out of neurons. After spinal cord injury, inhibitory neurons produce dramatically less KCC2. As a result, investigators found, they can’t properly respond to inhibitory signals from the brain. Instead, they respond only to excitatory signals that tell them to keep firing. And since these neurons’ own signals are inhibitory, the result is too much inhibitory signaling in the local spinal circuit. Bottom line: The brain’s commands telling the limbs to move aren’t relayed. By restoring KCC2, with either CLP290 or genetic techniques, the inhibitory neurons can again process inhibitory signals from the brain, so they fire less. This shifts the overall circuit back toward excitation, the researchers found, making it more responsive to input from the brain. This had the effect of reanimating spinal circuits disabled by the injury.

* Cogpep peptide. Cogpep targets the ABCA1 transporter that improves the apoE - ABCA1 cooperation. Cogpep helps prevent cognitive impairment, decrease tau hyperphosphorylation, decrease neuronal amyloid Beta, increase (VGLUT1) and neurogenesis, increase ApoE receptor 2 (LRP8). It may also help in reducing the severity of Multiple Sclerosis, reverse arterial stiffness assocated with Preeclampsia at late pregnancy and early postpartum and, as an anti-atherosclerotic. ApoE4 is the strongest genetic risk factor for Alzheimer’s disease and is also over-represented in many other dementias including Parkinson's dementia, fronto-temporal dementia and traumatic brain injury suggesting a general metabolic culprit - lipid transport. ApoE4-driven dementia is found in approximately 60% of Alzheimer's patients and more than 2.5 million patients in the USA alone. The risk in apoE4 homozygote carriers is extra severe and increasing the likelihood to develop Alzheimer’s disease 12-fold. Recent data shows that apoE4 compared to apoE2 and apoE3 has impaired cooperation with its lipidation protein, the ATP Binding Cassette-A1 (ABCA1).

* Covid-19 Prevention, a natural compunds Mix for 2019-nCoV. 2019-nCoV, a novel coronavirus, caused the pneumonia outbreak in China and continue to expand. The host receptor for 2019-nCoV Angiotensin-converting enzyme 2 (ACE2), which is the same as the host receptor of SARS-CoV. Targeting ACE2 holds the promise for preventing 2019-nCoV infection. Chinese Medicine herbs could be a valuable pool for identifying active compounds for treating infection of 2019-nCoV. In this study, we summarize several active compounds including Baicalin, Scutellarin, Hesperetin, Nicotinamine and Glycyrrhizin that could have potential anti-2019-nCoV effects, and we conduct molecular docking to predict their capacity for binding ACE2, which may subsequently prevent the 2019-nCoV infection. We propose that these selected compounds worth further investigation for preventing 2019-nCoV. (Chen, H.; Du, Q. Potential Natural Compounds for Preventing 2019-nCoV Infection. Preprints 2020, 2020010358)

* Covid-19 Vaccine. Plitidepsin is a chemical compound extracted from the ascidian Aplidium albicans. It is currently undergoing clinical trial testing as a Covid-19 vaccine. Plitidepsin is used and approved for hematologic cancer in Australia, pending approval in New Zealand, Taiwan and South Korea. Like all didemnin compounds, plitidepsin exhibits antitumor, antiviral and immunosuppressive activities. It shows promise in shrinking tumors in pancreatic, stomach, bladder, prostate cancers, acute lymphoblastic leukemia and multiple myeloma.

* Cryosim-3 is novel TRPM8 agonist which relieves dry eye discomfort. C3 is a selective and potent TRPM8 agonist without TRPV1 or TRPA1 activity. The dense neural network of the ocular surface, especially of the cornea, generates the signs and symptoms of DED, namely, redness and tearing, and irritation, itch, pain and dysesthesia such as feelings of grittiness, soreness, the presence of a foreign object, dryness, and eye fatigue. It is likely that TRPV1 transduces the signals of heat, irritation, and pain from the ocular surface. The role of TRPM8 is multifaceted. TRPM8 may be associated with the detection of “dryness” on the eye surface because it is activated by evaporative

cooling and by hyperosmolar solutions. TRPM8 may also be a direct stimulator of tear secretion from the lacrimal gland.

* Dependency And Avoidance Of Withdrawal. Dopamine and Oxytocin are two neurochemicals that are primary drivers underlying the trauma bond. Often when a person is traumatized by a romantic partner or someone they love, these chemicals become significantly dysregulated. The recording plays the sound frequencies of Bupicomide and L-368,889 to inhibit both Dopamine and Oxytocin. L-368,899 is a drug used in scientific research which acts as a selective antagonist of the oxytocin receptor, with good selectivity over the related vasopressin receptors. The centrally mediated roles of oxytocin, such as in social behaviour and pair bonding, and studies in primates have shown L-368,899 to reduce a number of behaviors such as food sharing, sexual activity and caring for infants, demonstrating the importance of oxytocinergic signalling in mediating these important social behaviors. Bupicomide is a fusaric acid analog, potent inhibitors of Dopamine beta-hydroxylase (DBH), and thus interfered with the biosynthesis of the pressor neurohormone, norepinephrine.

* Desquamation in healthy skin is an invisible process and the stratum corneum is turned over completely within 2–4 weeks, while maintaining the tissue thickness. This process is a normal protective mechanism of the skin to prevent pathogens from colonizing the skin, and is referred to as desquamation. The overall integrity of the stratum corneum is maintained by specialized intercellular proteins called corneodesmosomes. The components of the corneodesmosomes are gradually degraded by the enzymes that digest proteins, as the corneocytes are pushed towards the surface of the skin. As a result of the weakened corneodesmosomes in the outer skin surface, the uppermost layers of corneocytes get exfoliated through frictional forces such as rubbing or washing. Expression of corneodesmosomes and, notably, the process of their degradation are probably altered during several dermatoses leading to the disruption of the permeability barrier or to abnormal, often compensative, Stratum Corneum accumulation. The recording includes the three adhesive proteins desmoglein-1, desmocollin-1 and corneodesmosin which compose the corneodesmosomes and provide the cohesive forces to connect the adjacent corneocytes, Mifepristone a Glucocorticoid receptor antagonist, LEKTI factor which regulates desquamation, FLG factor and, Apigenin.

* Disulfiram is a drug used to support the treatment of chronic alcoholism by producing an acute sensitivity to ethanol (drinking alcohol). Disulfiram works by inhibiting the enzyme acetaldehyde dehydrogenase, causing many of the effects of a hangover to be felt immediately following alcohol consumption. Disulfiram plus alcohol, even small amounts, produce flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, fast heart rate, low blood pressure, fainting, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, abnormal heart rhythms, heart attack, acute congestive heart failure, unconsciousness, convulsions, and death. Disulfiram should be used in conjunction with counseling and support (see 2-

Mercaptoethanol above.) An alternate use of disulfiram can eradicate all forms borrelia can take. Disulfiram also has anticancer and antifungal properties, it belongs to a general group of HIV drugs called latency-reversing agents, and it is effective against parasites such as malaria and babesia. Recent experience with disulfiram, shows efficacy against bartonella. A clinical study on a small group of chronic Lyme patients reports these patients have become asymptomatic (if not cured) for 21 months.

* Emoxypine is an antioxidant whose chemical structure resembles that of pyridoxine (a type of vitamin B6). Emoxypine has a wide range of applications in medical practice. It purportedly exercises anxiolytic, anti-stress, anti-alcohol, anticonvulsant, nootropic, neuroprotective and anti-inflammatory action. Emoxypine presumably improves cerebral blood circulation, inhibits thrombocyte aggregation, lowers cholesterol levels, has cardioprotective and antiatherosclerotic action. One study determined the effectiveness of emoxypine in 205 patients with clinical manifestations of lumbosacral radiculopathy (LSR).

* Halicin is a drug which acts as an inhibitor of the enzyme c-Jun N-terminal kinase (JNK). Halicin was identified by researchers at MIT in 2019 using an in silico deep learning approach, as a likely broad- spectrum antibiotic. This was subsequently verified by in vitro cell culture testing followed by in vivo tests in mice. It showed activity against drug-resistant strains of Clostridium difficile, Acinetobacter baumannii, and Mycobacterium tuberculosis, with an unusual mechanism of action involving the sequestration of iron inside the bacterial cells which thereby interferes with their ability to properly regulate the pH balance across the cell membrane. Since this is a different mode of action from most antibiotics, halicin retained activity against bacterial strains resistant to many commonly used drugs.

* Heat Rash Mix plays the sound frequencies of salicylic acid, cetrimide, menthol, and acetone.

* Irritable Male Syndrome (IMS) can be defined as a state of hypersensitivity, frustration, anxiety, and anger that occurs in males and is associated with biochemical changes, hormonal fluctuations, stress, and loss of male identity. Even though Irritable Male syndrome is in most cases affected by stress that is high and/or low testosterone; high levels of estrogen may also cause men to be irritable. The major source of this imbalance is a level of testosterone that is declining associated with andropause and aging. Other issues may add to the andropause-related swing of moods in male such as gaining of weight. This generates fat cells that create estrogen from testosterone. The greater the level of estrogen and the lower the levels of testosterone the larger is the probability of irritability in males. Additionally, high levels of the hormone for stress cortisol reduce testosterone levels, triggering the increased likelihood of swinging of moods in men. Certain drugs can also cause imbalances of hormones. The recording plays the sound frequency of testosterone.

* Lanthionine ketimine is a naturally occurring sulfur amino acid metabolite found in the mammalian brain and central nervous system (CNS). Beside its neurotrophic effects,

lanthionine ketimine and its ester LKE protect neurons against oxidative stress and inhibit the activation of microglia (brain macrophages) triggered by exposure to inflammatory cytokines. Beside its neurotrophic effects, lanthionine ketimine and its ester LKE protect neurons against oxidative stress and inhibit the activation of microglia (brain macrophages) triggered by exposure to inflammatory cytokines. Lanthionine ketimine ester promotes locomotor recovery after spinal cord injury by reducing neuroinflammation and promoting axon growth 1. Lanthionine ketimine and its synthetic derivatives have recently demonstrated neurotrophic, neuroprotective, and antineuroinflammatory properties.

* Norepinephrine, also called noradrenaline (NA) or noradrenalin, is an organic chemical in the catecholamine family that functions in the brain and body as a hormone and neurotransmitter. The general function of norepinephrine is to mobilize the brain and body for action. Norepinephrine release is lowest during sleep, rises during wakefulness, and reaches much higher levels during situations of stress or danger, in the so-called fight-or-flight response. In the brain, norepinephrine increases arousal and alertness, promotes vigilance, enhances formation and retrieval of memory, and focuses attention; it also increases restlessness and anxiety. In the rest of the body, norepinephrine increases heart rate and blood pressure, triggers the release of glucose from energy stores, increases blood flow to skeletal muscle, reduces blood flow to the gastrointestinal system, and inhibits voiding of the bladder and gastrointestinal motility. Many important psychiatric drugs exert strong effects on noradrenaline systems in the brain, resulting in side-effects that may be helpful or harmful. Norepinephrine is similar to adrenaline. It is used to treat life-threatening low blood pressure (hypotension) that can occur with certain medical conditions or surgical procedures. Norepinephrine is often used during CPR (cardio- pulmonary resuscitation).

* Skin Homeostasis plays the sound frequencies of Y27632 and Apocynin. The protein Collagen Type- 17A1 has been noted by scientists as beneficial to keep skin “intact and unimpaired” through the process of cell competition. COL17A1 encourages cell competition by driving out weak cells and revitalizing stronger cells toward replication, and in the process, maintaining tissue fitness. The two compounds with the ability to “kick-start” the antiaging process, Y27632 and apocynin, produced positive results on skin cells via skin regeneration and reducing skin aging. They "significantly promoted" repair and regeneration even to deep-tissue skin wounds, and it was done two ways, according to the study, published in the journal Nature. Stem cells with higher potential or quality are thus selected for homeostasis, but their eventual loss of COL17A1 limits their competition, thereby causing ageing. The resultant hemidesmosome fragility and stem cell delamination deplete adjacent melanocytes and fibroblasts to promote skin ageing. Conversely, the forced maintenance of COL17A1 rescues skin organ ageing, thereby indicating potential angles for anti-ageing therapeutic intervention.

* Skin Moisture. The recording plays the sound frequency of Sodium lactate, Allantoin, Palmitoleic acid, Lactic acid, Glycerin and, Urea. -Sodium lactate is a food additive and an effective humectant and moisturizer. -Allantoin has a moisturizing and keratolytic effect, increasing the water content of the extracellular matrix and enhancing the

desquamation of upper layers of dead skin cells, increasing the smoothness of the skin; promoting cell proliferation and wound healing; and a soothing, anti-irritant, and skin protectant effect by forming complexes with irritant and sensitizing agents. -Palmitoleic acid or Omega-7 is a common constituent of the glycerides of human adipose tissue. It promotes healthy and moisturized skin, hair, and nails at a cellular level, supports also a healthy gastrointestinal and digestive system from start to finish. -Lactic acid is used in topical preparations and cosmetics to adjust acidity and for its disinfectant and keratolytic properties. -Glycerin is used in medical, pharmaceutical and personal care preparations, often as a means of improving smoothness, providing lubrication, and as a humectant. Ichthyosis and xerosis have been relieved by the topical use glycerin. -Urea is used as a cream for ichthyosis and other hyperkeratotic skin disorders.

* Testosterone and Growth Hormone. During human puberty there is a substantial increase in growth hormone (GH) and sex steroidal hormone concentrations, as well as in GH production rates and insulin- like growth factor-I (IGF-I). The nonoxidative leucine disposal (NOLD), a measure of whole body protein synthesis, increased significantly after combined T/GH. The combination of T/GH also resulted in greater changes in body composition than T alone, with comparable decreases in %FM and corresponding increases in fat free mass (FFM). Measures of carbohydrate (CHO) metabolism, including glucose production and oxidation rates, were unaffected by either T or T/GH combination. Plasma IGF-I concentrations increased after T treatment and even more after T/GH combination. In conclusion GH and T are synergistic on whole body protein anabolism and body composition in males, even at a young age, but the positive effects of T on protein anabolism and body composition appear to need a basal amount of GH for those effects to be observed. GH and T both potentiate the development of the full body composition and metabolic changes of puberty.

* TIK-301 is an agonist for the melatonin receptors MT1 and MT2 that is under development for the treatment of insomnia and other sleep disorders. Its agonist action on MT1 and MT2 receptors in the suprachiasmatic nucleus in the brain enables its action as a chronobiotic. Studies show that it is more potent and more effective than melatonin.TIK-301's action on MT1 and MT2 receptors contributes to its sleep-promoting effects because melatonin's effects at these same receptors is linked with maintenance of normal-sleep wake cycle. Compared to melatonin, it has nine times greater bioavailability and six times greater area under the curve (AUC), which means the body retains more of an administered dose.TIK-301 is intended to be a take-as-need drug for primary insomnia, circadian rhythm disorders, depression, as well as sleep disorders in blind individuals and can be used to alleviate neuroleptic-induced tardive dyskinesia in schizophrenia patients. In addition to a sleep aid, TIK-301 has been found useful in treating other disorders. Because of its affinity for serotonin receptors, it has potential to serve as a possible antidepressant drug, similar to agomelatine. TIK-301 has also been considered for use in patients with mild cognitive impairment (MCI) because of sleep disorder prevalence.

* XIB-4035 is a therapeutic candidate for small-fiber neuropathy, a type of peripheral neuropathy that occurs from damage to the small unmyelinated peripheral nerve fibers.

These fibers, are present in skin, peripheral nerves, and organs. The role of these nerves is to innervate the skin (somatic fibers) and help control autonomic function (autonomic fibers). XIB-4035 is a GRF-Alpha1 receptor enhancer compound. This nonpeptidyl small molecule is capable of inducing activation of a receptor that normally bind a relatively large protein ligand such as GDNF. In experiments with XIB-4035 mice showed improvements in nerve structure and regained sensitivity to heat compared with controls. Sensation improved in both diabetic mice and mice that developed small-fiber neuropathy through genetic manipulation. Even mice with advanced disease showed improvements.

1.3.1.32 RT-MB-44

https://archive.org/details/Resonant_Therapy-Molecular_Biology_44

A-1165901; AEOL-10150; AMG7905; Bosentan; Collagen Type 17A1; Compound 21; C ovid-19 Emergency; GDNF Factor; Icilin; Iprazochrome; KISS1 Factor; Levocabastine; Medrysone; Mogroside IIIE; Nintedanib; P7C3-A20; PBI-4050; Paeoniflorin; Pirfenidone; Polyglutamic Acid; Polymixin B-Bacitracin; RO-5166017; Saikosaponin D; Selexipag; S ERPINF1 Factor; Sodium Hyaluronate; Stem Cells Blood Substitute; Talarazole; Thymo sin Beta-4; Thymulin

* A-1165901 is a blocker of the activation of the TRPV1 channel by capsaicin, thereby in ducing hypothermia involving tail-skin, vasodilation at thermoneutrality, as well as a decr ease body temperature. TRPV1 antagonists cause hypothermia by an on-target action: on TRPV1 channels on abdominal sensory nerves. These channels are tonically activat ed by protons and drive the reflectory inhibition of thermogenesis and tail-skin vasocons triction. Those TRPV1 antagonists that cause hypothermia further inhibit these cold defe nces, thus decreasing body temperature.

* AEOL-10150 is a superoxide dismutase mimetics for the treatment of idiopathic pulmo nary fibrosis (IPF), amyotrophic lateral sclerosis (ALS), and acute radiation syndrome (A RS). AEOL 10150 significantly improves survival by reducing inflammation and fibrosis i n the lungs after exposure to a range of chemical insults and radiation exposure. AEOL 10150 has the potential to be used as a medical countermeasure for sulfur mustard gas exposure, as well as mechanistic insights into how the drug protects the lungs from othe r insults such as radiation and in clinical applications such as idiopathic pulmonary fibro sis and radiation and chemotherapy for cancer patients. Pulmonary fibrosis, which is a h ardening of the tissues of the lung that prevents its proper functioning is one of the long-term effects that Covid-19 could leave.

* AMG7905 is a transient receptor potential vanilloid type 1 modulator. Antagonists of th e vanilloid receptor TRPV1 (transient receptor potential vanilloid type 1) have been repo rted to produce antihyperalgesic effects in animal models of pain. TRPV1 antagonists ca use hypothermia by an on-target action: on TRPV1 channels on abdominal sensory ner

ves. These channels are tonically activated by protons and drive the reflectory inhibition of thermogenesis and tail-skin vasoconstriction. Those TRPV1 antagonists that cause h ypothermia further inhibit these cold defences, thus decreasing body temperature.

* Bosentan is a dual endothelin receptor antagonist used in the treatment of pulmonary artery hypertension (PAH). Bosentan is used to treat people with moderate pulmonary a rterial hypertension and to reduce the number of digital ulcers — open wounds on especially on fingertips and less commonly the knuckles — in people with systemic scleroderma. In addition to the risk of causing birth defects and of causing liver damage, bosentan has a high risk of causing edema, pulmonary veno-occlusive disease, decreasing sperm counts, and decreases in hemoglobin and hematocrit. Bosentan treatment may result in an improvement of clinical, angiographic and endothelial function outcomes. Bosentan should be investigated further in the management of Thromboangiitis Obliterans (TAO) patients. Only two out of 13 extremities underwent amputation (one major and one minor) after Bosentan treatment.

* Collagen Type-17A1 has been noted by scientists as beneficial to keep skin “intact and unimpaired” through the process of cell competition. COL17A1 encourages cell competition by driving out weak cells and revitalizing stronger cells toward replication, and in the process, maintaining tissue fitness. Stem cells with higher potential or quality are thus selected for homeostasis, but their eventual loss of COL17A1 limits their competition, thereby causing ageing. The resultant hemidesmosome fragility and stem cell delamination deplete adjacent melanocytes and fibroblasts to promote skin ageing. Conversely, the forced maintenance of COL17A1 rescues skin organ ageing, thereby indicating potential angles for anti-ageing therapeutic intervention. The recording includes the sound frequency of COL17A1 and Hydroxytyrosol -for Vitamin C support.

* Compound 21 (C21) is the first potent and selective agonist of angiotensin AT2 receptors, preventing endothelial inflammation and leukocyte adhesion in vitro and in vivo. AT2 Agonist C21 prevents cognitive decline after permanent stroke in aged animals. AT2 Agonist C21 attenuates pulmonary inflammation in a model of acute lung injury. AT2 Agonist C21 attenuates the Progression of Lung Fibrosis and Pulmonary Hypertension in an Experimental Model of Bleomycin-Induced Lung Injury.
C21 has also shown a potent anti-inflammatory, anti-fibrotic, antioxidant and anti-apoptotic potential in various diseases including heart failure, myocardial infarction, chronic inflammatory diseases, and neurological diseases such as ischemic stroke. A pool of evidences suggest that C21, either alone or in combination with angiotensin receptor blockers such as Telmisartan could be extremely beneficial in the treatment of diabetic nephropathy, a chronic inflammatory condition sharing its pathogenesis with aforementioned diseases. Pulmonary fibrosis, which is a hardening of the tissues of the lung that prevents its proper functioning is one of the long-term effects that Covid-19 could leave.

* Covid-19 Emergency is a suggested first line of response in case of respiratory distress, intestinal inflammatory response, or both. The recording plays the sound frequency of Perftoran, an artificial blood product used as an antishock and anti-

ischemic agent. Dioxygen to provide oxygen delivery, and FEG tripeptide which has activity against diseases characterized by over exuberant inflammatory responses such as systemic inflammatory response syndrome and other acute inflammatory diseases. Arthritis, sepsis, acute pancreatitis, asthma, acute respiratory inflammation, inflammatory bowel disease. Inhibits cardiac, pulmonary, and intestinal anaphylactic activity, and decreases pulmonary and pancreatic inflammation. To treat Covid-19 try the Pandemic Viral Infection at RT-MB 42.

* GDNF Factor. The so called GAS1 protein accelerates the functional decline of muscle stem cells. The protein is found in only a small number of young muscle stem cells, but is present in all aged muscle stem cells. Tinkering with muscle stem cells to express GAS1 in the entire young stem cell population resulted in diminished regeneration. By contrast, removing GAS1 from aged muscle stem cells rejuvenated them to a youthful state that supported robust regeneration. They also discovered that GAS1 inhibits another protein, a cell-surface receptor called RET, which they showed to be necessary for muscle stem cell renewal. The more GAS1 protein is present, the more RET's function is reduced. The inhibition of RET by GAS1 could be reversed by the third protein called GDNF, which binds to and activates RET. Indeed, when the researchers injected GDNF directly into the muscles of aged mice, muscle stem cell function and muscle regeneration were restored.

* Icilin is a synthetic super-agonist of the transient receptor potential M8 (TRPM8) ion channel. Although structurally not related with menthol it produces an extreme sensation of cold both in humans and animals. It is almost 200 times more potent than menthol and 2.5 times more efficacious. Despite their similar effects icilin activates the TRPM8 receptor in a different way. Icilin is effective in an experimental model of itch and pain. It is now used as a research tool for the study of TRP channels. Icilin dose-dependently contracts the proximal and distal colon, and the contraction patterns observed for icilin are similar to those induced by allyl isothiocyanate - an organosulfur compound responsible for the pungent taste of mustard, radish, horseradish, and wasabi. A colon’s muscles contract to help move feces along the lower portion of the gastrointestinal (GI) tract. Potential uses include reduction of blood glucose levels, weight gain, or fat depot levels and treatments for metabolic syndrome, obesity, prediabetes, and type II diabetes. Other applications have been claimed, such as treating hypercholesterolemia, hypertension, coronary heart disease, diabetic neuropathy and retinopathy, erectile dysfunction, kidney disease, and pancreatitis, among others.

* Iprazochrome is an antimigraine agent. It is a serotonin antagonist.

* KISS1 factor encodes protein Metastasis-suppressor KiSS-1 or kisspeptin. Recent studies indicate that kisspeptin plays a role in stimulating some of the emotions and responses that lead to sex and reproduction. Participants administered kisspeptin in a study had enhanced activity in the region of the brain that is typically activated by romance or sexual arousal when they were shown sexual romantic images of couples. This suggests that kisspeptin could boost the behavioral circuits associated with sex and love. Additionally, the researchers discovered that volunteers given with kisspeptin

have enhance activity in the region of the brain important in regulating negative moods when they were shown negative images. Aside from the increased activity in the brain, the participants also reported a reduction in negative mood in a post-scan questionnaire. Due to this, the researchers are also looking at the potential of kisspeptin as treatment to depression.

* Levocabastine is a selective second-generation H1 receptor antagonists. It is used for allergic conjunctivitis or similar allergic conditions. As well as acting as an antihistamine, levocabastine has also subsequently been found to act as a potent and selective antagonist for the neurotensin receptor NTS2.

* Medrysone is a topical, synthetic glucocorticoid with metabolic, anti-inflammatory and anti-allergic properties. Medrysone exerts its effect by interacting with specific intracellular glucocorticoid receptors and subsequently binds to DNA to modify gene expression. This results in an induction of the synthesis of certain anti-inflammatory proteins while inhibiting the synthesis of certain inflammatory mediators. Consequently, an overall reduction in chronic inflammation and autoimmune reactions is accomplished. Medrysone is in a class of drugs called corticosteroids. It inhibits processes in the body that cause inflammation. Therefore, the swelling and pain of inflammatory conditions is decreased. Medrysone ophthalmic is used to treat eye inflammation caused by infections, injury, surgery, or other conditions.

* Mogroside IIIE, a Novel Anti-Fibrotic Compound, Reduces Pulmonary Fibrosis through Toll-Like Receptor 4 Pathways. Research shows that MGIIIE suppressed pulmonary edema, pro-inflammatory mediators release and higher MPO activity in lung tissues. MGIIIE not only increased the phosphorylation of AMPK but suppressed the over-expression of TLR4 and MyD88. In addition, MGIIIE also inhibited the activation of MAPKs and nuclear factor NF-κB signalling in lung tissues from LPS-challenged mice. Mogroside IIIE is also a therapeutic reagent to treat Gestational Diabetes Mellitus mice. Mogroside IIIE administration significantly relieves hyperglycemia and insulin resistance in GDM mice, as well as improved fetal development and reproductive outcome. Mogro side IIIE treatment can inhibit inflammation and improves glucose metabolism and insuli n resistance in GDM mice, which may be serving as an effective agent for the treatment. Pulmonary fibrosis, which is a hardening of the tissues of the lung that prevents its prop er functioning is one of the long-term effects that Covid-19 could leave.

* Nintedanib is a medication used for the treatment of idiopathic pulmonary fibrosis.It ha s been shown to slow down decrease in forced vital capacity, and it also improves peopl e's quality of life. Nintedanib does not improve survival in people with IPF. It interferes wi th processes like fibroblast proliferation, differentiation and laying down extracellular mat rix. Pulmonary fibrosis, which is a hardening of the tissues of the lung that prevents its p roper functioning is one of the long-term effects that Covid-19 could leave.

* P7C3-A20 is a derivative of P7C3, a proneurogenic, neuroprotective agent. P7C3A20 i s a more potent fluorinated analogue of P7C3 (up to ten times stronger). P7C3 acts in p reserving new nerve cells, using medicinal chemisty techniques and cultured cells. Res

ults showed that active variants of P7C3 protected cultured cells from doxorubicin-medi ated toxicity selectively, as demonstrated by three findings: 1) doxorubicin reduced intra cellular Nicotinamide Adenine Dinucleotide (NAD) levels, most likely by activation of PA RP; 2) active variants of P7C3 protected cultured cells from dox:tox presumably by stim ulating a rebound in intracellular levels of NAD; and 3) active P7C3 variants enhanced a ctivity of purified NAMPT enzyme. The dox:tox protective effect is directly connected to t he ability of P7C3 to enhance the salvage pathway by which nicotinamide is converted t o NAD. Their findings are supported by earlier reports that programmed expression of NAMPT enzyme protected mammalian cells from genotoxic stress as well as extending life span of budding yeast.

* PBI-4050 is an oral compound designed to prevent inflammation and tissue scarring in several organs, including the lungs, kidneys, liver, heart and pancreas. PBI-4050 targets a new antifibrotic pathway involving two receptors that play opposite roles in fibrosis dev elopment, GPR40 has a protective effect while GPR84 has a damaging effect. PBI-4050 binds to both receptors, but while it activates GPR40, it suppresses the activity of GPR8 4, which is potentially beneficial in treating fibrosis. The therapy also showed benefits in type 2 diabetes patients with metabolic syndrome, and patients with Alström syndrome.Pulmonary fibrosis, which is a hardening of the tissues of the lung that prevents its proper functioning is one of the long-term effects that Covid-19 could leave.

* Paeoniflorin is a novel heat shock protein-inducing compound, is mediated by the activation of heat shock transcription factor 1 (HSF1), which has antiallergic, anti-obesity, anti-inflammatory and immunoregulatory effects. Paeoniflorin can activate PI3K/Akt signaling pathway to protect from PC12 cell induced injury, it protects thymocytes against irradiation-induced cell damage by scavenging ROS and attenuating the activation of the mitogen-activated protein kinases. Paeoniflorin thermotolerance induction may also help in heat stress.

* Pirfenidone is a medication used for the treatment of idiopathic pulmonary fibrosis. It works by reducing lung fibrosis through downregulation of the production of growth factors and procollagens I and II. Pirfenidone can also treat liver fibrosis, scars, skin ulcers and fibrotic tissue. Pulmonary fibrosis, which is a hardening of the tissues of the lung that prevents its proper functioning is one of the long-term effects that Covid-19 could leave.

* Polyglutamic acid acts as an anti-wrinkle agent, emulsifier, lightening/whitening agent and moisturizing agent. It is a natural occurring, multi-functional, and biodegradable biopolymer produced through fermentation by bacillus subtilis using glutamic acid. PGA is consists of glutamic acid monomers cross-linked between alpha-amino and gamma-carboxyl groups. It is water-soluble. It helps to improve skin quality and reduces skin wrinkle conditions. Used in skin care formulations.

* Polymyxin B and Bacitracin are a topical, otic, and ophthalmological antibiotic mixture.

* RO-5166017 acts as a potent and selective agonist for the trace amine-associated

receptor 1, with no significant activity at other targets. Some TAAR1 receptor agonists are methamphetamine, MDMA and 3-iodothyronamine. In animal studies RO-5166017 was shown to prevent stress-induced hyperthermia and block dopamine-dependent hyperlocomotion, as well as blocking the hyperactivity which would normally be induced by an NMDA antagonist. Current studies strongly support that TAAR 1 is implicated in the functional regulation of monoaminergic systems, especially dopaminergic system, and that TAAR 1 serves as a homeostatic “brake” system that is involved in the modulation of dopaminergic activity. TAAR 1 agonists reduce the neurochemical effects of cocaine and amphetamines, attenuate abuse- and addiction-related behavioral effects of cocaine and methamphetamine. Besides, TAAR1 agonists may be promising therapeutic agents for reducing relapse susceptibility during abstinence.

* Saikosaponin-D ameliorates heat stress-induced oxidative damage by modulating the activity of anti-oxidant enzymes and HSP72 in LLC-PK1 cells. Heat stress stimulates the production of reactive oxygen species (ROS), which cause oxidative damage in the kidney.

* Selexipag is the first medicine of a new class of treatments called prostanoids receptor agonists. It makes its beneficial effects by working in a similar way to other prostanoids. However, it has been designed to reduce the amount and severity of systemic (whole body) side effects caused by medicines such as iloprost or epoprostenol. Selexipag is a selective prostacyclin IP receptor agonist. Prostacyclin is produced in the endothelial cells and induces vasodilation; also inhibits platelet aggregation. Patients with pulmonary arterial hypertension appear to have a dysregulation in the prostacyclin metabolic pathways.

* SERPINF1 Factor is a multifunctional protein exhibiting a wide range of antiangiogenic, antitumorigenic, antioxidant, antiinflammatory, antithrombotic, neurotrophic, and neuroprotective properties. Most recently, SERPINF1 was shown to be the most potent endogenous inhibitor of vasopermeability. It may also protect against noise-induced hearing loss with accompanying tinnitus and sound hypersensitivity.SERPINF1 has a restorative effect on blood tissue barrier architecture after noise damage.

* Sodium hyaluronate is used to treat knee pain in patients with joint inflammation (osteoarthritis). It is usually used in patients who have not responded to other treatments such as acetaminophen, exercise, or physical therapy. Hyaluronic acid may also be used in plastic surgery to reduce wrinkles on the face or as a filler in other parts of the body. May be used in ophthalmology to assist in the extraction of cataracts, the implantation of intraocular lenses, corneal transplants, glaucoma filtration, retinal attachment and in the treatment of dry eyes. Finally, hyaluronic acid is also used to coat the bladder lining in treating interstitial cystitis.

* Stem Cells Blood Substitute. SR1 and UM171 enhance proliferation of hematopoietic progenitor cells and suppress differentiation. Hematopoietic stem cells offer a possible means of producing transfusable blood. When used in conjunction with SR1, a known

transcription factor, UM171 allowed for suppression of differentiation and led to increased CFU-GEMM growth. The myeloid precursor (CFU-GEMM) cell is capable of differentiating into white blood cells, red blood cells, and platelets, all of which are normally found in circulating blood. Experiment results suggest that UM171+SR1 together enhance proliferation of progenitor cells and suppress differentiation. CFU-GEMM is a colony forming unit that generates myeloid cells. CFU-GEMM cells are the oligopotential progenitor cells for myeloid cells; they are thus also called common myeloid progenitor cells or myeloid stem cells. "GEMM" stands for granulocyte, erythrocyte, monocyte, megakaryocyte. The common myeloid progenitor (CMP) and the common lymphoid progenitor (CLP) are the first branch of cell differentiation in hematopoiesis after the hemocytoblast (hematopoietic stem cell). HSCs are an essential support mechanism of blood cells and the immune system. As humans and other species age, HSCs become more numerous but less effective at regenerating blood cells and immune cells. This makes older people more susceptible to infections and disease, including leukemia.The hematopoietic process may help in Covid-19.

* Talarozole was an investigational drug for the treatment of acne, psoriasis and other keratinization disorders. Development has been discontinued. Talarozole inhibits the metabolism of retinoic acid by blocking cytochrome P450 enzyme CYP26 isoenzymes (CYP26A1 and possibly also CYP26B1), retinoic acid hydroxylases. Because of this mechanism, it is called a retinoic acid metabolism blocking agent (RAMBA). It has 750-fold higher potency than the earlier drug liarozole as well as greater selectivity, with more than 300-fold selectivity for inhibition of CYP26A1 over other steroid-metabolizing enzymes like CYP17A1 (17α-hydroxylase/17,20-lyase) and aromatase (CYP19A1).

* Thymosin beta-4 in trials with patients having pressure ulcers, venous pressure ulcers, and epidermolysis bullosa, TMSB4 accelerated the rate of repair. It was also found to be safe and well tolerated. In other trials, TMSB4 has been to improve the conditions of dry eye and neurotrophic keratopathy with effects lasting long after the end of treatment. TMSB4 is the endogenous form of synthetic peptide TB500.

* Thymulin (also known as Thymic Factor) is a nonapeptide produced by two distinct epithelial populations in the thymus. It requires zinc for biological activity. The hormone is believed to be involved in T-cell differentiation and enhancement of T and NK cell actions. Besides this rather paracrine or auto-organic effects on the thymus dependent immune system, Thymulin seems to have neuroendocrine effects as well. There exist bidirectional interactions between thymic epithelium and the hypothalamus-pituitary axis (for example, thymulin follows a circadian rhythm and physiologically elevated ACTH levels correlate positively with thymulin plasma levels and vice versa. A recent focus has been on the role of thymulin as an effector on proinflammatory mediators/cytokines. Researchers hope to develop drugs thwarting inflammatory processes associated with neurodegenerative diseases and even rheumatism with the help of thymulin analogs. One such study concludes that Thymulin enhances airway repair and improves lung function in a mouse model of allergic asthma. Moreover, thymulin has been associated with anorexia nervosa.

1.3.1.33 RT-MB-45

https://archive.org/details/Resonant_Therapy-Molecular_Biology_45

Astrocyte To Neuron Conversion; Bisacodyl; CASIN; CHIR-Metformin; Docusate-Bisacodyl; Docusate; Griffithsin; Heat Exhaustion Fluid Therapy; Hematopoietic Cell Induction; Hexamine; Hydrocortamate; Hydroxychloroquine; Iverrmectin; Mannitol; N-Ethylmaleimide; Nitroxoline; Oxygen Therapy; Plecanatide; Polycarbophil; Prucalopride; SLC12A5-SLC12A9 Factors; Serlopitant; Skin-Itch Anti-Fungal; Skin Cell To Neuron Conversion; Skin Tropical Protection; THC-Acetate; TR-044888; TS-022-Serlopitant; TS-022; Triglycol

* Astrocyte To Neuron Conversion. Neuronal loss is the leading cause of symptoms in patients with neural injury or neurodegenerative disorders.Following nerve injury, glial cells including astrocytes, NG2 cells, and microglia will proliferate and become reactive glial cells to form glial scarring in order to protect neighboring tissues from further damage. However, the continuous presence of glial scars also inhibits neuronal growth and synaptic transmission in the injured area. Thus, reactive glial cells are a double-edged sword that can have both neuroprotective and neuroinhibitory functions during the progression of injury or diseases. Glial scarring has been widely reported after traumatic brain injury, stroke, and spinal cord injury, but efforts to remove the neuroinhibitory effect of glial scarring has only resulted in limited success. Direct conversion from glial cells into neurons inside the brain or spinal cord without cell transplantation can avoid the problems of tumor formation, aberrant differentiation, and immunorejection that are often associated with stem cell transplantation. This chemical protocol is composed of four small molecules (DAPT, CHIR99021,SB431542, and LDN193189) to efficiently reprogram HAs into neurons. (https://doi.org/10.1016/j.stemcr.2019.01.003)

* Bisacodyl is an organic compound that is used as a stimulant laxative drug. It works directly on the colon to produce a bowel movement. It is typically prescribed for relief of episodic and chronic constipation and for the management of neurogenic bowel dysfunction, as well as part of bowel preparation before medical examinations, such as for a colonoscopy. Bisacodyl is a derivative of triphenylmethane. Bisacodyl works by stimulating enteric nerves to cause peristalsis, i.e., colonic contractions. It is also a contact laxative; it increases fluid and salt secretion. The action of bisacodyl on the small intestine is negligible; stimulant laxatives mainly promote evacuation of the colon.

* CASIN is a CDC42 factor inhibitor. Hematopoietic stem cells detect infectious agents themselves and begin to divide -- that is, without signals from growth factors. This direct production of defensive cells damages hematopoiesis in the long term, however, which could lead to malignant hematopoietic stem cell diseases at advanced age. HSCs are stem cells that originate in the bone marrow and generate all of the body's red and white blood cells and platelets. They are an essential support mechanism of blood cells and the immune system. As humans and other species age, HSCs become more numerous but less effective at regenerating blood cells and immune cells. This makes older people more susceptible to infections and disease, including leukemia. A pharmacologic inhibito

r of Cdc42, CASIN, can reduce the protein's activity in the cells. The improved structural organization, increased polarity and restored functionality in the older cells to levels found in young cells. HSCs rejuvenated by targeting Cdc42 do function similarly to young stem cells. CASIN reduces active levels of Cdc42 in aged hematopoietic stem cells (HSCs) to that in young HSCs. Reverses the aging-related and polarity phenotype of aged HSCs to that of young HSCs in vivo. Increases histone H4K16 acetylation in aged HSCs.

* CHIR99021-Metformin. AMPK activators Metformin and CHIR99021 improve gut bacteria in humans, Fragile X, promote inner ear, dental pulp, cancer stem cell differentiation. AMPK activation links the amelioration of pathological cellular defects in Fragile X Syndrome and Hutchinson-Gilford progeria syndrome with the gut microbiota, HIV-1 latency, adult and cancer stem cells, learning and memory, and the creation of all human life. (https://ampkprogeriahiv.wordpress.com/2017/07/23/ampk-activators-metformin-chir99021-improve-gut-bacteria-in-humans-fragile-x-promote-inner-ear-dental-pulp-cancer-stem-cell-differentiation/)

* Docusate-Bisacodyl

* Docusate is a laxative of the stool softener type used to treat constipation. It is considered a good choice in children who have hard feces. Side effects are uncommon. Rarely, there may be abdominal cramps or diarrhea. Efficacy decreases with long-term use, and may cause poor bowel function. Docusate is acceptable during pregnancy and breast feeding. It works by allowing more water to be absorbed by the feces. Docusate does not stay in the gastrointestinal tract, but is absorbed into the bloodstream and excreted via the gallbladder after undergoing extensive metabolism. The effect of docusate may not necessarily be all due to its surfactant properties. Perfusion studies suggest that docusate inhibits fluid absorption or stimulates secretion in the portion of the small intestine known as the jejunum. Use is typically recommended with plenty of water. Emollient agents such as Docusate prevent constipation rather than treating long-term constipation.

* Griffithsin is a virucide with a broad spectrum ability to bind to the glycoproteins of other viruses, such as the coronavirus. Griffithsin's three identical carbohydrate domains bind to specific oligosaccharides on the envelope of viral glycoproteins. This was demonstrated by in vitro and in vivo studies. For instance, it was shown that griffithsin binds to the SARS-CoV spike glycoprotein to inhibit entry of the SARS virus and thus inhibit infection. A 2014 study showed griffithsin to also possess useful antiviral activity against Ebola virus. It has been shown in vitro to be a highly potent HIV entry inhibitor. It is currently being investigated as a potential microbicide for use in the prevention of the transmission of HIV.

* Heat Exhaustion Fluid Therapy includes a balance of electrolytes akin to Lactated Ringer's, recommended in restoration of the blood volume either in hypovolemia -blood loss due to trauma- or under severe dehydration. It is contraindicated in people with a pH > 7.5, in those with liver disease who are unable to metabolize lactate, or those with lactic acidosis. It is a mixture of sodium chloride, sodium lactate, potassium chloride, calcium chloride with mannitol added. The recording is not suitable for maintenance therapy (i.e.,

maintenance fluids) since the lactate is converted into bicarbonate, long-term use will ca use patients to become alkalotic. Heat exhaustion is a severe form of heat illness. It is a medical emergency. Heat exhaustion is caused by the loss of water and electrolytes thr ough sweating. The recording is used for replacing fluids and electrolytes in those who have low blood volume or low blood pressure.

* Hematopoietic Cell Induction. This cocktail (Valproic acid (VPA), CHIR99021, and E61 6452), was initially discovered to induce neural stem or progenitor cell generation, which belongs to ectoderm. It is developmentally different direction from hematopoietic cell ge neration, which belongs to mesoderm. Ectoderm and mesoderm developmentally come from the same lineage and even mesectoderm committed progenitor cells are identified. Thus, it is speculated that the chemical cocktail used here might induce somatic cells int o progenitor cells, which further develop into ectodermal neural cells or mesodermal he matopoietic cells individually under specific conditions. Hematopoietic stem/progenitor c ells (HSPCs) hold great promise for treating hematopoietic system diseases. These exp anding and advanced reprogramming strategies might yield inexhaustible hematopoietic cells for cell therapy.
(https://doi.org/10.1002/advs.201901785)

* Hexamine is used for the treatment of urinary tract infection. It decomposes at an acidi c pH to form formaldehyde and ammonia, and the formaldehyde is bactericidal; the man delic acid adds to this effect. Hexamine was first introduced into the medical setting in 1 899 as a urinary antiseptic. However, it was only used in cases of acidic urine, whereas boric acid was used to treat urinary tract infections with alkaline urine. In an alkaline env ironment, hexamine was found to be almost completely inactive. Its use had temporarily been reduced in the late 1990s, due to adverse effects, particularly chemically-induced hemorrhagic cystitis in overdose, but its use has now been re-approved because of the prevalence of antibiotic resistance to more commonly used drugs. This drug is particular ly suitable for long-term prophylactic treatment of urinary tract infection, because bacteri a do not develop resistance to formaldehyde. It should not be used in the presence of c hronic kidney disease. Hexamine is successfully used for treatment of excessive sweati ng and concomitant odor.

* Hydrocortamate is a synthetic glucocorticoid with anti-inflammatory and immunosuppr essive properties. It is used to treat inflammation due to corticosteroid-responsive derm atoses. Glucocorticoids are a class of steroid hormones characterised by an ability to bi nd with the cortisol receptor and trigger a variety of important cardiovascular, metabolic, immunologic and homeostatic effects.

* Hydroxychloroquine is used to treat systemic lupus erythematosus, rheumatic disorder s like rheumatoid arthritis, porphyria cutanea tarda, and Q fever, and certain types of ma laria. It is considered the first line treatment for systemic lupus erythematosus. Certain t ypes of malaria, resistant strains, and complicated cases require different or additional medication. It is widely used to treat primary Sjögren syndrome, but has not been show n to be effective. Hydroxychloroquine is widely used in the treatment of post-Lyme arthri tis. It may have both an anti-spirochaete activity and an anti-inflammatory activity, simila

r to the treatment of rheumatoid arthritis. Hydroxychloroquine is being studied as an exp erimental treatment for coronavirus disease 2019 (COVID-19).

* Ivermectin is a medication used to treat many types of parasite infestations. This inclu des head lice, scabies, river blindness (onchocerciasis), strongyloidiasis, trichuriasis, as cariasis, and lymphatic filariasis. Use is contraindicated in turtles. Common side effects i nclude red eyes, dry skin, and burning skin. It is unclear if it is safe for use during pregn ancy, but is probably acceptable for use during breastfeeding. It belongs to the avermec tin family of medications. It works by causing the parasite's cell membrane to increase in permeability, resulting in paralysis and death. Ivermectin is also being studied as a pote ntial antiviral agent against the chikungunya and yellow fever. In 2013, this antiparasitic drug was demonstrated as a novel ligand of farnesoid X receptor (FXR), a therapeutic t arget for Nonalcoholic Fatty Liver Disease. Ivermectin is also of interest in the preventio n of malaria, as it is toxic to both the malaria plasmodium itself, and the mosquitos that c arry it. Ivermectin inhibits replication of SARS-CoV-2 in vitro (in monkey kidney cell cultr e) making it a possible candidate for COVID-19 drug repurposing research. Moreover, c ell culture experiments also showed promise for treating Dengue virus infection, but late r failed in animal models. According to experts Ivermectin could help in the late stages o f Covid-19 infection, while Hydroxyquinilonone is more indicated in the early and mediu m stages of the infection.

* Mannitol is a type of sugar alcohol used as a sweetener and medication. As a sweeten er it is used in diabetic food as it is poorly absorbed by the intestines. As a medication, it is used to decrease pressure in the eyes, as in glaucoma, and to lower increased intracr anial pressure. Mannitol is in the osmotic diuretic family of medications and works by pul ling fluid from the brain and eyes. Mannitol is used to reduce acutely raised intracranial pressure until more definitive treatment can be applied, e.g., after head trauma. It may a lso be used for certain cases of kidney failure with low urine output, decreasing pressur e in the eye, to increase the elimination of certain toxins, and to treat fluid build up. Man nitol acts as an osmotic laxative and is sometimes sold as a laxative for children. Mannit ol increases blood glucose to a lesser extent than sucrose (thus having a relatively low glycemic index) so is used as a sweetener for people with diabetes, and in chewing gu ms. Although mannitol has a higher heat of solution than most sugar alcohols, its compa ratively low solubility reduces the cooling effect usually found in mint candies and gums. However, when mannitol is completely dissolved in a product, it induces a strong coolin g effect. Mannitol is contraindicated in people with anuria, congestive heart failure. Adve rse effects include hyponatremia and volume depletion leading to metabolic acidosis.

* N-Ethylmaleimide NEM increased cell surface levels of SLC12A5 and modulated the p hosphorylation of key regulatory residues within the large cytoplasmic domain of SLC12 A5 in neurons. Compounds that either increase the surface stability of SLC12A5 or redu ce Thr-1007 phosphorylation may be of use as enhancers of SLC12A5 activity. Deficits i n the activity of SLC12A5 lead to epilepsy and are also implicated in neurodevelopment al disorders, neuropathic pain, and schizophrenia.

* Nitroxoline is an antibiotic that has been in use in Europe for about fifty years, and has

proven to be very effective at combating biofilm infections. Nitroxoline was shown to cau se a decrease in the biofilm density of P. aeruginosa infections, which would allow acce ss to the infection by the immune system in vivo. It was shown that nitroxoline functions by chelating Fe2+ and Zn2+ ions from the biofilm matrix; when Fe2+ and Zn2+ were rei ntroduced into the system, biofilm formation was reconstituted. The activity of biofilm de gradation is comparable to EDTA, but has a history of human use in clinical settings and therefore has a precedent with which to allow its use against “slimy” biofilm infections. T he chelating activities of nitroxoline have also been used in an anticancer setting.

* Oxygen Therapy is dioxygen O2, or molecular oxygen essential for cellular respiration in all aerobic organisms, providing most of the chemical energy released. Oxygen is wid ely used in emergency medicine, both in hospital and by emergency medical services or those giving advanced first aid. In the pre-hospital environment, high-flow oxygen is indi cated for use in resuscitation, major trauma, anaphylaxis, major bleeding, shock, active convulsions, and hypothermia. Oxygen therapy, also known as supplemental oxygen, is the use of oxygen as a medical treatment. This can include for low blood oxygen, carbo n monoxide toxicity, cluster headaches, and to maintain enough oxygen while inhaled a nesthetics are given. Long-term oxygen is often useful in people with chronically low oxy gen such as from severe COPD or cystic fibrosis. A common use of supplementary oxyg en is in people with chronic obstructive pulmonary disease (COPD), the occurrence of c hronic bronchitis or emphysema, a common long-term effect of smoking, who may requi re additional oxygen to breathe either during a temporary worsening of their condition, o r throughout the day and night. High concentration oxygen is used as home therapy to a bort cluster headache attacks, due to its vaso-constrictive effects. People who are recei ving oxygen therapy for low oxygen following an acute illness or hospitalization should n ot routinely have a prescription renewal for continued oxygen therapy without a physicia n's re-assessment of the person's condition. If the person has recovered from the illness, then the hypoxemia is expected to resolve and additional care would be unnecessary a nd a waste of resources. Oxygen therapy is not recommended for people who have suff ered pulmonary fibrosis or other lung damage resulting from bleomycin treatment. High l evels of oxygen given to infants cause blindness by promoting overgrowth of new blood vessels in the eye obstructing sight. This is retinopathy of prematurity (ROP). Oxygen h as vasoconstrictive effects on the circulatory system, reducing peripheral circulation.

* Plecanatide is a drug approved for the treatment of chronic idiopathic constipation (CI C) and irritable bowel syndrome with constipation. Plecanatide is an agonist of guanylat e cyclase-C. Plecanatide increases intestinal transit and fluid through a buildup of cGMP The symptoms should also have been present for at least three of the last six months t o establish the chronic nature of the condition before treatment with Plecanatide is indic ated. Use of Plecanatide by persons under the age of 6 poses a serious dehydration ris k and studies have demonstrated Plecanatide can cause death in juvenile mice due to t his dehydrating effect. Use of Plecanatide is also contraindicated in persons who are su spected of having a mechanical gastrointestinal obstruction.

* Polycarbophil is a drug used as a stool stabilizer. Chemically, it is a synthetic polymer of polyacrylic acid cross-linked with divinyl glycol, with calcium as a counter-ion. t is use

d as stool stabilizer to treat constipation, diarrhea and abdominal discomfort. Bulk laxati ves absorb liquid in the intestines and swell to form a soft bulky stool. The bulky mass st imulates the intestinal muscles, speeding stool transit time through the colon. Results us ually occur within 12 to 72 hours. Calcium polycarbophil will not work without increased f luid intake. Calcium polycarbophil has been marketed as an over-the-counter agent use d for treating functional bowel disorder and as a bulk-producing agent. A study looked at the effects of calcium polycarbophil on general irritable bowel syndrome (IBS) symptom s. Fourteen patients with IBS-diarrhea and twelve with IBS-constipation were given calci um polycarbophil for eight weeks and their colon transit times were measured with radio paque markers in the colon. The patients with diarrhea reported fewer bowel movement s, more solid stools and reduced abdominal pain. Patients with constipation reported mo re frequent bowel movements, looser stools and less pain.

* Prucalopride is a drug acting as a selective, high affinity serotonin (5-HT4) receptor ag onist which targets the impaired motility associated with chronic constipation, thus norm alizing bowel movements. The drug has also been tested for the treatment of chronic int estinal pseudo-obstruction. Prucalopride is contraindicated where there is hypersensitivi ty to the active substance or to any of the excipients, renal impairment requiring dialysis, intestinal perforation or obstruction due to structural or functional disorder of the gut wall, obstructive ileus, severe inflammatory conditions of the intestinal tract, such as Crohn's disease, and ulcerative colitis and toxic megacolon/megarectum. Prucalopride alters col onic motility patterns via serotonin 5-HT4 receptor stimulation: it stimulates colonic mas s movements, which provide the main propulsive force for defecation.

* SLC12A5 - SLC12A9 Factors. SLC12A5 is a potassium (K^+)/chloride (Cl^-) symporter that maintains chloride homeostasis in neurons. Loss of SLC12A5 following neuronal damage (i.e. ischemia, spinal cord damage, physical trauma to the central nervous system) results in the loss of inhibitory regulation and the subsequent development of neuronal hyperexcitability, motor spasticity, and seizure-like activity as GABAA receptors and glycine receptors revert from hyperpolarizing to depolarizing postsynaptic effects. SLC12A9 or Cation-chloride cotransporter-interacting protein 1 is a potent activator of SLC12A5. Deficits in the activity of SLC12A5 lead to epilepsy and are also implicated in neurodevelopmental disorders, neuropathic pain, and schizophrenia.

* Serlopitant is a small molecule, highly selective NK1-R antagonist. Two critical mediators of the urge to scratch are Substance P, or SP, and its receptor, the neurokinin-1 receptor, or NK1-R. SP is a naturally occurring peptide in the tachykinin neuropeptide family. Tachykinins have a broad range of functions in the nervous and immune systems. SP binding of NK1-R has been shown to be a key mediator of sensory nerve signaling, including the itch-scratch reflex and the vomiting reflex.

* Skin-Itch Anti-fungal. Tolnaftate is a synthetic thiocarbamate used as an anti-fungal agent. Tolnaftate is used to treat fungal conditions such as jock itch, athlete's foot and ringworm. Although the exact mechanism of action is not entirely known, it is believed to inhibit squalene epoxidase, an important enzyme in the biosynthetic pathway of ergosterol (a key component of the fungal cell membrane) in a similar way to

terbinafine. Miconazole is an antifungal medication used to treat ring worm, pityriasis versicolor, and yeast infections of the skin or vagina. It is used for ring worm of the body, groin (jock itch), and feet (athlete's foot). In addition to its antifungal actions, miconazole, similarly to ketoconazole, is known to act as an antagonist of the glucocorticoid receptor. Miconazole inhibits the fungal enzyme 14alpha-sterol demethylase, resulting in a reduced production of ergosterol. Interactions are possible with anticoagulants, phenytoin, terbinafine, some newer atypical antipsychotics, cyclosporin, and some statins used to treat hypercholesterolemia. Econazole is an antifungal medication of the imidazole class. Econazole is used to treat skin infections such as athlete's foot, tinea, pityriasis versicolor, ringworm, and jock itch.

* Skin Cell To Neuron Conversion. VCRFSGY (valproic acid, CHIR99021, E616452, Forskolin, SP600125, GO6983, and Y-27632) is a specific recipe of molecules that essentially switched off skin cell genes in human cells and turned them on neuron genes. A chemical treatment to transform skin cells into neurons.

* Skin Tropical Protection is a combination of zinc oxide, acting as astringent. Kaolin for skin protection and anti-itch, menthol for analgesia and glycerin for skin protection.

* THC acetate is the acetate ester of THC. It acts as a metabolic prodrug for THC itself. It has been reported to be approximately two times to three times as potent as THC. THC-Acetate is not a naturally occurring cannabinoid, it is a cannabinoid produced by using specific chemicals to acetylate THC. The most unique property of this material is that there is a delay of about thirty minutes before its effects are felt. This means it needs to be deacetylated by enzymes in the bodiy before the THC becomes active enough to feel the effects. Besides helping with Parkinson's symptoms, it is a more potent cure for cancer than THC.

* TR-044888 is a small molecule that in contrast to conventional antifungals, does not target cell viability; rather, it represents a true antivirulence compound, whose mechanism of action is inhibition of filamentation and biofilm formation, essentially disarming Candida albicans of its two most important virulence factors during infection. Besides, repeated exposure to TR-044888 does not lead to the development of resistance.

* TS-022-Serlopitant

* TS-022 is a prostanoid DP1 receptor agonist, on pruritus, cutaneous barrier disruptions and atopic dermatitis. Prostanoids have been implicated in the pathophysiology of pruritus. Prostaglandin D2 (PGD2) has been shown to play a role in inhibiting pruritus produced by atopic-like dermatitis.In addition, TS-022, has been shown to suppress scratching and improve the skin inflammation of atopic dermatitis.

* Triglycol is used in air sanitizer products, when aerosolized it acts as a disinfectant. Triglycol is known for its hygroscopic quality and its ability to dehumidify fluids, hence can help reduce bacteria and pathogens that thrive in wet surfaces. Triethylene glycol is

well established as a relatively mild disinfectant toward a variety of bacteria, influenza A viruses and spores of Penicillium notatum fungi. Its exceptionally low toxicity, broad materials compatibility, and low odor combined with its antimicrobial properties indicates that it approaches the ideal for air disinfection purposes in occupied spaces.

1.3.1.34 RT-MB-46

https://archive.org/details/Resonant_Therapy-Molecular_Biology_46

5-NOT; Alendronate; Allergy-Antihistamines Mix; BAY-11-7082; Betulin; BGP-15; Breathing Difficulty- Heliox Therapy; Bucladesine; Camphor; CHIR-99021; CHIR-99021-Valproic Acid; EMA401; Epalrestat; ETC-1002; Hair Regeneration; Hypoxia-Hypoxemia Therapy; IDE-1; Inclisiran; J-2156; KU-32; Liposomal Clodronate; LM22A-4; MCC950; Microgabalin; N106; Photoregulin3; PM43I; SB-216763; Strontium Ranelate; Tissue Regeneration

* 5-NOT or 5-nonyloxytryptamine oxalate (5-NOT) a PSA mimetic, is a small molecule that has been shown to be effective in vitro. 5-NOT promotes in-vitro neuritogenesis of motor neurons, as well as in vitro myelination and Schwann cell motility, all of which are critical to peripheral nervous repair.
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Alendronate administration reduced bone resorption and increased mineralized tissue formation inside the bone tunnel. Thus, the capacity of alendronate to protection from tendon deterioration and also reduce of bone loss may act synergistically to improve tendon-bone integration.
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Allergy-Antihistamines Mix plays the sound frequencies of fexofenadine, desloratadine and levoceterizine. Fexofenadine is used in the treatment of allergy symptoms, such as hay fever and urticaria. Therapeutically, fexofenadine is a selective peripheral H1-blocker. Desloratadine is a tricyclic H1 antagonist used to treat allergic rhinitis, nasal congestion and chronic idiopathic urticaria (hives). Levoceterizine acts as an inverse agonist that decreases activity at histamine H1 receptors. It is used for the treatment of allergic rhinitis (hay fever) and long term hives of unclear cause.

* Bay-11-7082 has been shown to significantly decrease MMP activities in injured anterior cruciate ligament (ACL) fibroblasts and thus hold promise as small molecule drugs to facilitate ACL repair. These recent efforts have remarkably improved the understanding of the effects of small molecules on ACL repair and tendon-to-bone interface healing. Regeneration or replacement of a ruptured/torn ligament or tendon is one of the most common procedures performed by sports medicine surgeons. Anterior cruciate ligament (ACL) rupture is one of the most common injuries of the knee due to trauma or disease.
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Betulin is a small molecule whose inhibition of SREBP decreased the biosynthesis of c holesterol and fatty acid. In vivo, betulin ameliorated diet-induced obesity, decreased th e lipid contents in serum and tissues, and increased insulin sensitivity. Furthermore, bet ulin reduced the size and improved the stability of atherosclerotic plaques. Inhibition of t he SREBP pathway can be employed as a therapeutic strategy to treat metabolic disea ses including type II diabetes and atherosclerosis. Betulin, which is abundant in birch ba rk, could be a leading compound for development of drugs for hyperlipidemia. Sterol reg ulatory element-binding proteins (SREBPs) are major transcription factors activating the expression of genes involved in biosynthesis of cholesterol, fatty acid and triglyceride.

* BGP-15 is a small molecule that improves cardiac function in two mouse models of he art failure. Atrial fibrillation, which is the most common abnormal heart rhythm, and heart failure are increasing in incidence, but current drugs show limited efficacy. BGP-15 can prevent or reduce episodes of irregular heartbeats and significantly improve heart functi on in mouse models of heart failure and atrial fibrillation. BGP-15 has already been test ed for human use as a treatment for other disorders and is known to be well-tolerated wi th a good safety profile. The drug works via an unexpected molecular pathway by increa sing activation of a receptor, called the insulin-like growth factor 1 receptor. A shortage o f this receptor has previously been associated with an increased risk of cardiovascular d isease. Understanding the mechanisms through which BGP-15 exerts its effects may fur ther aid the development of new therapies for heart disease.

* Breathing Difficulty Heliox Therapy. Heliox is a mixture of helium and dioxygen. Heliox is a medical treatment for patients with difficulty breathing. Helium is an odorless, non-e xplosive and biologically inert gas. It has been used for a long time as a mixture with ox ygen, known as heliox, in the treatment of upper and lower airway obstruction, such as asthma, chronic obstructive pulmonary disease, bronchiolitis and bronchopulmonary dy splasia. Heliox has the following benefits: Reduces resistance to flow within the airways and consequently decreases the work of breath during spontaneous and non-invasive p ositive-pressure ventilation; provides an optimal patient-ventilator interaction; and reduc es destructive hemodynamic effects. Additionally, heliox is used in children during bronc hoscopy, even as a treatment for pneumothorax and hyperammonemia. The helium–oxygen mixture was used in the treatment of severe asthma, cystic fibrosis, bronchoalveolitis, post-extubation pathologies and pharyngo–laryngeal edema. Also, it is usually less known that heliox can be used as a therapeutic agent in the treatment of acute respiratory distress or ventilatiory-induced lung inflammation.

* Bucladesine or dibutyryl cyclic-AMP (db-cAMP) has a significant effect on neural regeneration. Exogenous administration of db-cAMP into the injured area significantly improved motor recovery in a rat ischemia model. Additionally, the db-cAMP treated rat groups showed increased expression of growth associated protein 43 (GAP-43), a protein associated with axon regeneration and neural regeneration. Treatment with db-cAMP also effectively induces neuronal differentiation of neural stem/progenitor cells (NSPCs), resulting in a 67.5 fold increase of cells expressing beta III tubulin, a neural precursor protein, over control. Bucladesine showed significant attenuation in the

morphine withdrawal syndrome in the wild-type mice. Treatment with bucladesine suppresses proliferation and malignancy enhances cytoplasmic process formation and increases cytoplasmic glial fibrillary acidic protein (GFAP), suppressing malignant glioma invasion by decreasing the expression of CD44 isoforms. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Camphor relieves itching from insect bites, minor skin irritation, or joint pain. It is absorbed in the skin epidermis, where it stimulates nerve endings sensitive to heat and cold. The action on nerve endings also induces a slight local analgesia. Camphor inhibits coughing and relieves upper airway congestion due to the common cold. Camphor has been used in traditional medicine over centuries, probably most commonly as a decongestant. Camphor was used in ancient Sumatra to treat sprains, swellings, and inflammation.

* CHIR-99021, an AMPK activator led to the mobilization of resident mesenchymal stem cells in the tooth pulp that had been exposed via the drilling of holes in mice molars. This GSK3beta inhibitor-induced stem cell mobilization promoted a natural process of reparative dentin formation that completely restored dentin, leading the authors to conclude that stimulation of mesenchymal stem cell mobilization and differentiation into odontoblast-like cells may represent a novel approach to clinical tooth restoration.

* CHIR99021-Valproic acid, both of which activate AMPK, significantly expanded cochlear supporting cells (i.e. “inner ear stem cells”) that expressed and maintained the epithelial stem cell marker Lgr5. Treatment with CHIR and VPA also led to the differentiation of Lgr5-expressing cells into hair cells in high yield, providing additional evidence that AMPK activation promotes differentiation of adult stem cells including inner ear stem cells, possibly leading to treatments for hearing loss. Interestingly, the authors demonstrated in a previous study that CHIR and VPA also promoted the multilineage differentiation of Lgr5+ intestinal stem cells into mature enterocytes, goblet cells and Paneth cells. AMPK activation has also been shown to improve gut epithelial differentiation and metformin increases goblet and Paneth cell differentiation from intestinal epithelial cells, further indicating that AMPK activation likely represents a common mechanism of action linking structurally dissimilar compounds that enhance inner ear and intestinal stem cell maintenance and differentiation.

* EMA401 is a drug under development for the treatment of peripheral neuropathic pain. It was initially established as a potential drug option for patients suffering pain caused by postherpetic neuralgia. It may also be useful for treating various types of chronic neuropathic pains caused by lesions and other diseases affecting the somatosensory system in addition to postherpetic neuralgia. EMA401 has been implicated in alleviating pains associated with a host of neural abnormalities, ranging from excessive nerve sprouting due to damaged nerve caused by shingles, diabetes, osteoarthritis, HIV and chemotherapy. EMA401 is more effective and has virtually no central nervous system side effects in comparison to current drugs for pain relief. Pain pathways of the other functional systems have major molecular and mechanistic differences compared to pain pathways of the peripheral nervous system. EMA401 target proteins, angiotensin II type

2 receptors, are extremely important for nociception within the peripheral nervous system and less so for nociception within other functional systems. EMA401 is the first drug on the market that targets angiotensin II type 2 receptors (AT2R) with high affinity but has a low affinity for angiotensin II type 1 receptors.

* Epalrestat is a carboxylic acid derivative and a noncompetitive and reversible aldose reductase inhibitor used for the treatment of diabetic neuropathy, which is one of the most common long-term complications in patients with diabetes mellitus. It reduces the accumulation of intracellular sorbitol which is believed to be the cause of diabetic neuropathy, retinopathy and nephropathy It is well tolerated, with the most commonly reported adverse effects being gastrointestinal issues such as nausea and vomiting, as well as increases in certain liver enzymes. Eparestalt may help improvement of subjective neuropathy symptoms, abnormality of vibration sense, and abnormal changes in heart beat associated with diabetic peripheral neuropathy.

* ETC-1002 or Bempedoic acid is a small molecule inhibitor of ATP citrate lyase that also activates
5'-adenosine monophosphate-activated protein kinase, effectively reducing low-density lipoprotein cholesterol and inducing some other positive metabolic changes. Recent evidence from phase I and II clinical trials in humans has shown a positive efficacy and safety profile of ETC-1002, with low-density lipoprotein cholesterol reductions similar to those attainable by usual doses of many statins and with no major apparent side effects. Bempedoic acid is an oral, nonstatin therapy designed to primarily work in the liver to inhibit cholesterol biosynthesis. Bempedoic acid is a prodrug that is complementary to—yet distinct from—other lipid-lowering therapies, including statins. Bempedoic acid is converted to its active moiety primarily in the liver, and inhibits adenosine triphosphate citrate lyase (ACL)—an enzyme two steps upstream from HMG-CoA reductase, the target of statins—along the cholesterol biosynthesis pathway. Bempedoic acid is converted to its active moiety by very long-chain acyl-CoA synthetase-1 (ACSVL1), which is not present in skeletal muscle. By inhibiting ACL, bempedoic acid is designed to reduce cholesterol synthesis, resulting in LDL receptor upregulation.

* Hair regeneration requires reactivating dormant hair follicle stem cells. Pharmacological induction of autophagy is sufficient to activate quiescent telogen hair follicles, initiating new anagen hair growth. Hair loss resulting from shortened anagen, lengthened telogen, and/or impeded anagen induction may thereby be rescued by activating autophagy. Quiescent (telogen) hair follicles can be stimulated to initiate anagen and hair growth by small molecules that activate autophagy, including the metabolites alpha-ketoglutarate (alpha-KG) and alpha-ketobutyrate (alpha-KB), and the prescription drugs rapamycin and metformin, which impinge on mTOR and AMPK signaling. Anagen can be pharmacologically activated in telogen skin when natural anagen-inducing signal(s) are absent has implications for the treatment of hair loss patients.
(https://doi.org/10.1016/j.celrep.2019.05.070)

* Hypoxia-Hypoxemia Therapy. The application of positive-pressure mechanical ventilation is one of the cornerstones of support for patients with acute respiratory failure. Unfortunately, the clinical condition of some patients does not improve, despite escalating ventilatory support. Adjunctive therapies to mechanical ventilation such as nitric oxide and heliox have been explored for the purposes of minimizing injurious settings and supporting adequate gas exchange. The combined use of nitric oxide and heliox could be a rescue therapy for a critically ill infants with localized interstitial pulmonary emphysema and pulmonary hypertension. All the while conventional interventions were ineffective, not feasible, or unlikely to take effect in time, heliox and nitric oxide improved oxygenation, after echocardiographic evidence of high right-ventricular pressure. Regarding the coronavirus, doctors make different hypotheses about what happens inside the body of a patient with COVID-19. One of the hypotheses is that inflammation of the lungs, which develops under the influence of the coronavirus, leads to a thrombosis of small vessels in the lungs. Nitrogen monoxide allows these vessels to open and relieve patients.

* IDE-1 is an inducer of definitive endoderm 1. IDE1 activates the TGF-beta signaling pathway and induces definitive endoderm formation in human and mouse embryonic stem cells. It is also reported to increase the levels of Nodal expression, induce Smad2 phosphorylation and SOX17 expression. Beta cells are the major cells (70% of the total cells) in the islet of Langerhans of the pancreas, critical to store and release the hormone insulin to maintain glucose homeostasis. Irregularities with the normal functioning of beta cells can lead to either type 1 diabetes mellitus (T1DM), where the islets are completely destroyed by the patient’s own immune system (autoimmune response), or type 2 diabetes mellitus (T2DM), where patients are unable to respond to insulin due to insulin resistance and inadequate production.

* Inclisiran is a small interfering ribonucleic acid (siRNA) molecule being investigated for the treatment of hypercholesterolemia. Inclisiran may be an option in the future as a cholesterol-lowering medication, where it would likely be used in patients who are unable to achieve their LDL-C targets despite maximally tolerated statin therapy or who are intolerant to statin therapy. Inclisiran works by targeting the PCSK9 enzyme; however, as opposed to PCSK9 inhibitors, which are antibodies that inhibit circulating PCSK9, inclisiran is a chemically synthesized small interfering RNA (siRNA) molecule that reduces the production of PCSK9 through gene silencing. Once bound, inclisiran is rapidly taken in by the cell where it then binds to the RNA-induced silencing complex as well as the messenger RNA (mRNA) encoding PCSK9. The siRNA RISC complex cleaves the PCSK9 mRNA, preventing the synthesis of the PCSK9 protein. One siRNA RISC complex can do this degradation process with multiple PCSK9 mRNA. Without PCSK9 enzymes, there will be no lysosomal degradation of the LDL receptor, so LDL-C will bind the receptor, be recycled in the hepatocyte, and result in a lower serum LDL-C level.

* J-2156 is a somatostatin receptor 4 agonist which reduces mechanosensitivity of peripheral nerve afferents and spinal neurons in an inflammatory pain model. The analgesic effect of J-2156 in acute neurogenic/non-neurogenic inflammatory reactions

and chronic arthritis J-2156 is mediated mainly via peripheral SST4 receptors. Chronic Low Back Pin (LBP) is a debilitating condition that ranks among the most common reasons for patient visits to healthcare providers. J-2156 alleviated both primary and secondary hyperalgesia in the lumbar axial deep tissues at L4/L5 and L1 respectively. This was accompanied by a reduction in the otherwise augmented lumbar DRG (L4-L6) expression levels of the putative pro-nociceptive markers, pp38 MAPK and pp44/pp42 MAPK and a reduction in pp38 MAPK in the lumbar enlargement of the spinal cord. J-2156 is also a pharmacological target for relief of breast cancer-induced bone pain (BCIBP).

* KU-32 a novel drug for diabetic neuropathy, is safe for human islets and improves in vitro insulin secretion and viability. KU-32 can stop and even reverse diabetic peripheral neuropathy, or DPN, in mice. The condition leads to death of nerves in the extremities of individuals with diabetes. KU-32 is also a potential new treatment for 'chemo brain'. As many as 1 in 3 patients with cancer who undergo chemotherapy experience cognitive impairment as a result of the treatment. The cognitive dysfunction associated with chemotherapy is commonly referred to as “chemo brain.” The symptoms of chemo brain include difficulty remembering things, trouble concentrating and processing information, and overall confusion. Chemotherapy increases levels of hydrogen peroxide in the brain and KU-32 can counter the negative effects of this excessive substance. Hydrogen peroxide is a reactive oxygen species and potentially damaging which may have an effect on cognitive function. Additionally, it may serve as a preventative in order to treat it. KU-32 prevents cognitive impairment, and our preliminary neurochemical data suggest that it may prevent increases in hydrogen peroxide production.

* Liposomal Clodronate is an anti-osteoporotic drug approved for the prevention and treatment of osteoporosis in post-menopausal women and men to reduce vertebral fractures, hyperparathyroidism, hypercalcemia in malignancy, multiple myeloma and fracture related pain because of its potent anti-inflammatory and analgesic effects shown as a reduction in inflammatory markers. Intraperitoneal injections of liposomal clodronate selectively induced macrophage apoptosis, leading to tendon-to-bone healing with less scar formation, more organized collagen deposition, and improved pull-out strengths. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* LM22A-4 is a small molecule used for nonarteritic anterior ischemic optic neuropathy (AION), the most common acute optic neuropathy in those older than 50 years. LM22A-4, also can lead to improvements in respiratory problems, spatial memory, motor skill defects and brain performance in associated with Rett Syndrome. Finally, this compound (LM22A-4) may have potential as a therapeutic to reduce compulsive alcohol drinking without a generalized effect on motivation.

* MCC950 is a specific inhibitor of the NOD-like receptor family pyrin-domain-containing protein 3 (NLRP3) inflammasome. NLRP3 blockade can help attenuate asthma, neuropathic pain, colitis, stroke, chikungunya infection and more—including Parkinson’s. Parkinson's disease is the second-most common neurodegenerative disease worldwide, with 10 million sufferers, whose control of body movements is

affected. The disease is characterised by the loss of brain cells that produce dopamine, which is a chemical that co-ordinates motor control, and is accompanied by chronic inflammation in the brain. MCC950, given orally once a day, blocked NLRP3 activation in the brain and prevented the loss of brain cells, resulting in markedly improved motor function. MCC950 effectively 'cooled the brains on fire', turning down microglial inflammatory activity, and allowing neurons to function normally.

* Microgabalin is an effective drug for for post-herpetic neuralgia and diabetic peripheral neuropathic pain.

* N106 is a small molecule which increases SUMOylation of SERCA2a. This compound directly activates the SUMO-activating enzyme, E1 ligase, and triggers intrinsic SUMOylation of SERCA2a. We identified a pocket on SUMO E1 responsible for N106 effects. The incidence of heart failure (HF) continues to increase in the United States despite significant advances in pharmacological therapies and novel devices. There is an acute need for novel treatment strategies for heart failure. A key abnormality in HF is defective handling of calcium that has been partially related to abnormal sarcoplasmic reticulum (SR) function in cardiac myocytes. Reduced expression and altered activity of the cardiac sarcoplasmic reticulum Ca2+ ATPase (SERCA2a), have been found in human and animal models of HF.

* Photoregulin3 alters the activity of a transcription factor that regulates rod genes. In follow-up experiments, mice with a mutation that replicates many of the features of retinitis pigmentosa were given Photoregulin3 to see if it could slow the progression of the disease. Indeed, Photoregulin3 could stop many of the rod cells from degenerating in the treated mice. At the end of the experiment, the mice treated with this small molecule had about twice as many rods as the control mice. The treated mice also responded better to flashes of light.

* PM-43I can inhibit STAT6-dependent allergic airway disease in mice. Moreover, PM-43I reversed preexisting allergic airway disease in mice. Importantly, PM-43I was efficiently cleared through the kidneys and had no long-term toxicity. PM-43I represents the first of a class of small molecules that may be suitable for further clinical development as a therapeutic drug against asthma. Steroids prevent inflammation as well as other immune responses. The researchers' work shows that treating asthma with PM-43I may control asthma without impairing the ability of the body to fight pathogens. Steroids drive down all the immune system, but this small molecule specifically targets the pathway that leads to asthma, uncompromising the other pathways that allow the body to fight disease. Treatment alone would be able to control the asthma. PM-43I prevents the induction of fungal-induced asthma and, more importantly, reverses many of the hallmark features of asthma including airway constriction, lung inflammation, and lung mucus production.

* SB-216763 is a small molecule that generated mesenchymal stem cell-derived functional endothelial cells (MDFECs) and facilitated rapid transmural coverage of injured blood vessels. Small molecules with 1H-pyrrole-2,5-dione as a core structure

have great potential to improve theefficacy of MSC-based cell therapy for vascular diseases, such as atherosclerosis and restenosis. SB216763 also promotes axonal regeneration and remyelination, thereby providing a promising therapeutic approach for peripheral nerve injury. Furthermore, may be of use therapeutically in disease states associated with elevated GSK-3 activity such as non-insulin dependent diabetes mellitus and neurodegenerative disease.

* Strontium ranelate, a strontium (II) salt of ranelic acid, is an antiosteoporotic agent which both increases bone formation and inhibits bone resorption. Treating human chondrocytes with strontium ranelate strongly increased cartilage matrix formation by ionic stimulation of chondrocyte anabolism without affecting cartilage resorption, providing a preclinical basis for in vivo testing of strontium ranelate in OA. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Tissue Regeneration. Inducing stem cell differentiation is a promising means to aid in muscle regeneration. Three small molecules induced myoblast dedifferentiation, BIO (glycogen synthase-3 kinase inhibitor), SB203580 (p38 MAP kinase inhibitor), and lysophosphatidic acid. Additionally, these compounds did not affect the potential of the dedifferentiated cells to redifferentiate into myoblasts at a later date. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

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3-BrPA; Apremilast; Avacopan; BF844; BRD4780; BTZ043; Bermekimab; Clacosterone; IC-2; IEM-1460; Imiquimod; LCAT Enzyme; ML-SA5; MS2734; Mavorixafor; Mesenchymal Stem Cells Generation; Neurodazine-Nocodazole; PF-739; PJ34; Paroxetine; Plerixafor; Remdesivir; Resiquimod; Risdiplam; SADBE; Samcyprone; THI; Teslexivir; Trichostatin-A; Ursolic Acid-Tomatidine

* 3-BrPA is a small molecule able to lower levels of glycogen — a complex sugar that builds up to toxic levels in Pompe disease — and ameliorate muscle and heart structural defects in a new zebrafish model of the genetic disorder, a recent study has shown. Treatment with 3-BrPA also changed the activity of genes involved in autophagy, the process by which cells degrade or recycle components that are damaged or no longer needed. Autophagy is thought to be involved in treatment resistance in people with late-onset Pompe disease. Moreover, 3-BrPA unveiled to be a promising compound for treatment of conditions with glycogen accumulation. Bromopyruvic acid (3-BrPA) is a hexokinase II inhibitor and an effective antitumor agent. The characteristics of 3-bromopyruvate in vitro and in vivo have been reported in the scientific literature since the 1940s. Because it is a highly reactive alkylating agent and it is inherently unstable, it had been described as a metabolic poison. Research at Johns Hopkins has suggested that 3-bromopyruvate could be used to selectively kill cancer cells, while leaving normal

cells intact.

* Apremilast is used to treat a certain type of arthritis (psoriatic arthritis). Apremilast is also used to treat a certain type of skin condition (moderate to severe plaque psoriasis). Apremilast belongs to a class of drugs known as phosphodiesterase 4 (PDE4) inhibitors. For the treatment of psoriatic arthritis, it decreases pain and swelling, and may help improve flexibility in the affected joints. For the treatment of plaque psoriasis, it may help to reduce the redness, thickening, and scaling of the skin that occurs with this condition. Apremilast is also used to treat mouth sores in people who have Behcet's disease. It helps to reduce the pain and improve the healing of these mouth sores.

* Avacopan is an orally-administered small molecule that is a selective inhibitor of the complement C5a receptor, or C5aR. Avacopan is in Phase III development for the treatment of anti-neutrophil cytoplasmic auto-antibody-associated vasculitis (ANCA-associated vasculitis). In clinical studies to date, avacopan was shown to be safe, well tolerated and provided effective control of the disease while allowing elimination of high-dose steroids, part of the current standard of care. Avacopan for the treatment of patients with C3 glomerulopathy (C3G) and hidradenitis suppurativa (HS). The U.S. Food and Drug Administration has granted avacopan orphan-drug designation for ANCA-associated Vasculitis, C3G and atypical hemolytic uremic syndrome (aHUS).

* BF844 effectively attenuated progressive hearing loss and prevented deafness. BF844 is a stabilizer of CLRN1N48K in vitro and in vivo. BF844 effectively attenuated progressive hearing loss and prevented deafness in an Usher syndrome type III (USH3) mouse model. Usher syndrome (USH) is characterized by hearing loss or deafness at birth and progressive vision loss, and is the most common cause of inherited dual sensory deficit. No treatment is currently available to stop or slow the progression of vision or hearing loss in USH3, one of three clinical classifications for USH that are further divided into subtypes and all associated with different genes. This is the first small molecule targeted therapy for progressive hearing loss that has been developed in a mouse model of USH3, an USH classified by progressive loss of hearing and vision starting in the first few decades of life along with variable balance disorder.

* BRD4780 is a promising lead for the treatment of toxic proteinopathies. Intracellular accumulation of misfolded proteins causes toxic proteinopathies, diseases without targeted therapies. Mucin 1 kidney disease (MKD) results from a frameshift mutation in the MUC1 gene (MUC1-fs). MKD is a toxic proteinopathy. Intracellular MUC1-fs accumulation activated the ATF6 unfolded protein response (UPR) branch. BRD4780, a small molecule that clears MUC1-fs from patient cells, from kidneys of knockin mice and from patient kidney organoids. MUC1-fs is trapped in TMED9 cargo receptor-containing vesicles of the early secretory pathway. BRD4780 binds TMED9, releases MUC1-fs, and re-routes it for lysosomal degradation, an effect phenocopied by TMED9 deletion. BRD4780 is a promising lead for the treatment of MKD and other toxic proteinopathies. This is in fact a novel mechanism for the entrapment of misfolded proteins by cargo receptors and a strategy for their release and anterograde trafficking to the lysosome.

* BTZ043 is a new antitubercular drug candidate which targets the DprE1 (Rv3790) subunit of the enzyme decaprenylphosphoryl-beta-d-ribose 2'-epimerase. The new compound inhibits the enzyme which produces the molecule linking the various layers of the bacterial cell wall. BTZ043 acts as a new antimicobacterial agent that kills Mycobacterium tuberculosis.

* Bermekimab is an anti-IL-1alpha monoclonal antibody (mAb) for the treatment of atopic dermatitis and hidradenitis suppurativa. It is the antibody targeting IL-1a and has the potential for superior efficacy and safety compared to the current standard of care.

* Clascoterone is an antiandrogen medication which is under development for the treatment of acne and scalp hair loss in both males and females. It is given as a cream by application to the skin, for instance the face and scalp. Clascosterone is an antiandrogen, or antagonist of the androgen receptor (AR), the biological target of androgens such as testosterone and dihydrotestosterone. It shows no systemic absorption when applied to skin. A pilot clinical trial in 2011 of men treated with topical clascoterone 1% cream for acne found that the medication significantly reduced symptoms of acne and was well tolerated. Moreover, its effectiveness was significantly greater than that of the active comparator, tretinoin 0.05% cream. In a bioassay, the topical potency of the medication was greater than that of progesterone, flutamide, and finasteride and was equivalent to that of cyproterone acetate. Likewise, it is significantly more efficacious as an antiandrogen than other AR antagonists such as enzalutamide and spironolactone in scalp dermal papilla cells and sebocytes in vitro. In rodents, clascoterone has been found to possess strong local antiandrogenic activity, but negligible systemic antiandrogenic activity when administered via subcutaneous injection. Along these lines, the medication is not progonadotropic in animals.

* IC-2 was identified as a potent small molecule inhibitor capable of inducing the differentiation of human mesenchymal stem cells into hepatocytes. IC-2 potently induced hepatic differentiation of human bone marrow mononuclear cells which express CD90 and CD271. These cells were found to induce the highest production of urea and glycogen, important hepatocyte functions, in response to IC-2 treatment. CD90+ CD271+ cells also highly expressed albumin mRNA. IC-2, a small-molecule compound suppresses Wnt/beta-catenin signaling, and also suppresses liver fibrosis. Renal fibrosis compromises kidney function, and it is a risk factor for chronic kidney disease (CKD). CKD ultimately progresses to end-stage kidney disease that can be cured only by kidney transplantation. IC-2 suppresses the TGF-beta1-induced fibrogenic response of tubular epithelial cells and thus could be a promising therapeutic agent for the treatment of renal fibrosis. Human mesenchymal stem cells (MSCs) are expected to have utility as a cell source in regenerative medicine. The presence of cancer stem cells (CSCs) contributes to metastasis, recurrence, and resistance to chemo/radiotherapy in hepatocellular carcinoma (HCC). The novel derivative of small-molecule WNT inhibitor, IC-2, has the potential to suppress liver CSCs and can serve as a promising therapeutic agent to improve the prognosis of patients with HCC.

* IEM-1460 is an open-channel blocker of AMPA currents; selective for non-GluA2-

containing receptors. It is a drug compound that can block damage caused by loud noise, raising the possibility of medication that prevents noise-induced hearing loss.. Loud noise can damage the inner ear and cause hearing loss. Two different types of receptors — those that allow calcium to pass through and those that don't — are present at the same synapses. Normally, both are activated when transmitting sound information to the auditory nerve. IEM-1460 blocks the portion of these receptors that allows more calcium to pass through. In doing so, they prevent the damage, but the receptors that are not blocked allow hearing to continue. Blocking all of the receptors would, in theory, protect hearing but also cause temporary deafness — perhaps similar to the effect of wearing ear plugs. This would be helpful for long-term hearing preservation but not ideal in situations where people are exposed to dangerous levels of noise but still need to hear what is happening around them.

* Imiquimod is a patient-applied cream that acts as an immune response modifier prescribed to treat genital warts, Bowens disease (squamous cell carcinoma in situ), and, secondary to surgery, for basal cell carcinoma, as well as actinic keratosis. Imiquimod yields profound antitumoral activity by acting on several immunological levels synergistically. Imiquimod stimulates the innate immune system by activating toll-like receptor 7 (TLR7), commonly involved in pathogen recognition. Cells activated by imiquimod via TLR-7 secrete cytokines (primarily interferon-alpha (IFN-alpha), interleukin-6 (IL-6), and tumor necrosis factor-alpha (TNF-alpha)). There is evidence that imiquimod, when applied to skin, can lead to the activation of Langerhans cells, which subsequently migrate to local lymph nodes to activate the adaptive immune system. Other cell types activated by imiquimod include natural killer cells, macrophages and B-lymphocytes. Imiquimod exerts its effect by increasing levels of the opioid growth factor receptor (OGFr). In experiments, blocking OGFr function with siRNA technology resulted in loss of any antiproliferative effect of imiquimod.

* LCAT enzyme or Lecithin–cholesterol acyltransferase (LCAT) is an enzyme that converts free cholesterol into cholesteryl ester (a more hydrophobic form of cholesterol), which is then sequestered into the core of a lipoprotein particle, eventually making the newly synthesized HDL spherical and forcing the reaction to become unidirectional since the particles are removed from the surface. The enzyme is bound to high-density lipoproteins (HDLs) (alpha-LCAT) and LDLs (beta-LCAT) in the blood plasma. LCAT deficiency can cause impaired vision due to cholesterol corneal opacities, anemia, and kidney damage. It belongs to the family of phospholipid:diacylglycerol acyltransferases.

* ML-SA5 small molecule activation of ML1 by ML-SA5 ameliorates muscular dystrophy. One of the major causes of muscular dystrophy is defective sarcolemma repair, and lysosomal exocytosis is a primary route for resealing damaged membranes. Given the essential role of ML1 in lysosomal exocytosis and membrane resealing, it is likely that ML1's muscle protective effects are mediated by sarcolemma repair. ML1 facilitates sarcolemma repair, thereby reducing skeletal and cardiac muscle damage. Up-regulation of ML1 in muscle activates transcriptional factor EB and corrects lysosomal insufficiency. (https://doi.org/10.1126/sciadv.aaz2736)

* MS2734 is a bisubstrate Nicotinamide N-methyltransferase (NNMT) inhibitor. Small molecule nicotinamide N-methyltransferase inhibitor activates senescent muscle stem cells and improves regenerative capacity of aged skeletal muscle. NNMT inhibitors constitute a viable pharmacological approach to enhance aged muscle regeneration by rescuing muscle Stem Cells function, supporting the development of NNMTi as novel mechanism-of-action therapeutic to improve skeletal muscle regenerative capacity and functional recovery after musculoskeletal injury in older adults.

* Mavorixafor trihydrochloride (AMD-070 trihydrochloride) is a potent, selective and orally available CXCR4 antagonist. Originally developed for HIV treatment, it is now being repurposed for the treatment of WHIM syndrome, a sub-type of a primary immunodeficiency disease caused by CXCR4 mutations. It is also used for for the treatment of Waldenstrom's macroglobulinemia, a rare form of non-Hodgkin's lymphoma. Mavorixafor is being developed for the treatment of rare primary immunodeficiency diseases and certain cancers, including lymphomas, where mutations in CXCR4 cause an abnormal trafficking of white blood cells and support disease progression.

* Mesenchymal Stem Cells Generation (MSCs) are good candidates for brain cell replacement strategies and have already been used as adjuvant treatments in neurological disorders. Umbilical cord blood (UCB) with a protocol previously tested in bone marrow (BM-) MSCs consisting of a cocktail of six small molecules: I-BET151, CHIR99021, forskolin, RepSox, Y-27632, and dbcAMP (ICFRYA). Neuronal morphology and the presence of cells positive forneuronal markers (TUJ1 and MAP2) were considered attributes of neuronal induction. The ICFRYA cocktail increased the number of cells positive for mature neuronal markers in BM- and UCB-MSCs. The neuronal cells generated from UCB-MSCs and BM-MSCs showed increased reactivity of the neuronal genes TUJ1, MAP2, NF-H, NCAM, ND1, TAU, ENO2, GABA, and NeuN as well as down- and upregulation of MSC and neuronal genes, respectively. The present study showed marked differences between the MSCs from different sources in response to the transdifferentiation protocol used here.These results may contribute to identifying the best source of MSCs for potential cell replacement therapies.

* Neurodazine-Nocodazole promotes the expression of neuron-specific markers in treated C2C12 cells. In addition, the use of neurodazines in conjunction with a microtubule-destabilizing agent allows neurogenic conversion of both differentiated immature myotubes and mature skeletal muscle. Nocodazole is an antineoplastic agent which exerts its effect in cells by interfering with the polymerization of microtubules. Neurons are not regenerated effectively, and their injury causes neurodegenerative diseases. These diseases may be treated by the transplantation of neural stem cells. However, ethical and technical issues restrict cell therapies using neural stem cells. A more convenient and attractive approach is the use of small molecules with the capacity to induce neurogenesis from easily available cells or tissues. Such small molecules have the potential to allow tight controls over the timing and speed of cell differentiation.

* PF-739 was capable of lowering blood glucose in 1 hr. Evaluation of AMPK activity in

tissues showed that PF-739 resulted in increased AMPK phosphorylation in liver tissue. Moreover PF-739 caused an increase in AMPK activity, as assessed by ACC phosphorylation, in the skeletal muscle.The glucose-lowering effect of PF-739 resulted in an increase in the rate of glucose disposal, but had no impact on the endogenous glucose production (EGP) rate. This effect was consistent with activation of AMPK in the skeletal muscle with PF-739 and in the liver. These results indicate that the glucose-lowering phenotype of PF-739 is due to increases in systemic glucose uptake with no impact on hepatic glucose output. In contrast to the liver, activation of AMPK in the skeletal muscle is associated with glucose lowering and increased muscle glucose disposal, suggesting that AMPK activation in the skeletal muscle continues to hold promise as a therapeutic strategy to treat T2DM.
(https://doi.org/10.1016/j.cmet.2017.04.010)

* PJ34 is a small molecule used to treat stroke victims. PJ34 also is seen to offer ‘great potential’ for causing the aggressive tumor, as well as others, to self-destruct in humans. PJ34 induced the self-destruction of pancreatic cancer cells in mice. The treatment reduced the number of cancer cells by as much as 90 percent a month after being administered, according to a study. Pancreatic cancer is currently resistant to all treatments, and patients have poor chances of surviving for five years after being diagnosed. This molecule causes an anomaly during the duplication of human cancer cells, provoking their rapid cell death. Thus, cell multiplication itself resulted in cell death in the treated cancer cells. Furthermore, the PJ34 molecule “exclusively” affected the human cancer cells, but left benign ones unaffected. No adverse effects were observed, and there were no changes in the weight gain of the mice, nor in their behavior. In parallel studies, the research team found that the molecule “acts efficiently” when they tested it on other types of deadly cancer cell cultures in the lab, including aggressive forms of breast, lung, brain and ovarian cancer, all of which are resistant to current therapies.

* Paroxetine hydrochloride is the hydrochloride salt of paroxetine. It is an antidepressant drug. It has a role as an antidepressant, an anxiolytic drug, a hepatotoxic agent, a P450 inhibitor and a serotonin uptake inhibitor. It contains a paroxetinium(1+). Paroxetine hydrochloride has not been previously implicated in the context of hyperglycemia or diabetes. Paroxetine reduced hyperglycemia-induced mitochondrial ROS formation, mitochondrial protein oxidation, and mitochondrial and nuclear DNA damage, without interfering with mitochondrial electron transport or cellular bioenergetics. The ability of paroxetine to improve hyperglycemic endothelial cell injury was unique among serotonin reuptake blockers and can be attributed to its antioxidant effect, which primarily resides within its sesamol moiety. Paroxetine maintained the ability of vascular rings to respond to the endothelium-dependent relaxant acetylcholine, both during in vitro hyperglycemia and ex vivo, in a rat model of streptozotocin-induced diabetes. Thus, the current work identifies a novel pharmacological action of paroxetine as a protector of endothelial cells against hyperglycemic injury and raises the potential of repurposing of this drug for the experimental therapy of diabetic cardiovascular complications.

* Plerixafor is an immunostimulant used to mobilize hematopoietic stem cells in cancer

patients into the bloodstream. The stem cells are then extracted from the blood and transplanted back to the patient. In the form of its zinc complex, plerixafor acts as an antagonist (or perhaps more accurately a partial agonist) of the alpha chemokine receptor CXCR4 and an allosteric agonist of CXCR7. The CXCR4 alpha-chemokine receptor and one of its ligands, SDF-1, are important in hematopoietic stem cell homing to the bone marrow and in hematopoietic stem cell quiescence. The in vivo effect of plerixafor with regard to ubiquitin, the alternative endogenous ligand of CXCR4, is unknown. Plerixafor has been found to be a strong inducer of mobilization of hematopoietic stem cells from the bone marrow to the bloodstream as peripheral blood stem cells. Additionally, plerixafor inhibits CD20 expression on B cells by interfering with CXCR4/SDF1 axis that regulates its expression.

* Remdesivir is a monophosphoramidate prodrug of an adenosine analogue, with antiviral activity against EBOV. Remdesivir exhibits antiviral activity against multiple variants of EBOV and other filoviruses in cell-based assays. The broad-spectrum antiviral activity of Remdesivir in vitro against other pathogenic RNA viruses, including filoviruses, arenaviruses, and coronaviruses, suggests the potential for wider medical use. Remdesivir inserts into viral RNA chains, causing their premature termination. It is being studied during 2020 as a possible post-infection treatment for COVID-19.

* Resiquimod is a drug that acts as an immune response modifier, and has antiviral and antitumour activity. It is used as a topical gel in the treatment of skin lesions such as those caused by the herpes simplex virus and cutaneous T cell lymphoma, and as an adjuvant to increase the effectiveness of vaccines. Systemic administration has also been demonstrated through nanoparticle encapsulation, resulting in effective cancer immunotherapy through stimulation of tumor-associated macrophages. It has several mechanisms of action, being both an agonist for toll-like receptor 7 and 8, and an upregulator of the opioid growth factor receptor.

* Risdiplam is an investigative oral therapy for all types of spinal muscular atrophy (SMA), a neurodegenerative disease characterized by progressive muscle weakness and wasting (atrophy). Risdiplam works by potentially rectifying the underlying cause of SMA: a reduced amount of survival motor neuron (SMN) protein. This protein is essential to the health of motor neurons, the nerve cells that control muscle movement. The brain and spinal cord relay messages to the muscles via motor neurons. The correct transmission of these messages is vital for muscle health because they instruct muscles to contract and move. SMN protein deficiency leads to the break down of nerve cells and impedes their ability to work, causing muscles to atrophy. Risdiplam is a splicing modifier, meaning it changes the way the pre-mRNA is spliced so that it contains all the information necessary to make functional SMN protein. In this way, risdiplam promotes the production of a full-length and functional SMN protein from the SMN2 gene. It is expected that this promotion will increase working SMN protein levels inside cells, to support muscle health.

* SADBE or squaric acid dibutyl ester or dibutyl squarate derives from a squaric acid. is used for the treatment of warts. Squaric acid dibutyl ester is also used for treating

alopecia areata or alopecia totalis (autoimmune hair loss) through topical immunotherapy involving the production of an allergic rash. Squaric acid dibutylester is currently undergoing trials for use in treating herpes labialis (cold sores).

* Samcyprone or diphenylcyclopropenone (diphencyprone) is a topically administered experimental drug intended for treating alopecia areata and alopecia totalis. Topical immunotherapy using diphenylcyclopropenone may also be an effective treatment option for recalcitrant warts. Diphenylcyclopropenone triggers an immune response that is thought to oppose the action of the autoreactive cells that otherwise cause hair loss. One hypothesis is that in response to DPCP treatment, the body will attempt to downregulate inflammation through a variety of pathways, resulting in a downregulation of the autoimmune response at the hair follicle. This autoinflammatory reaction would otherwise destroy body's hair follicles.

* THI or 2-acetyl-4(5)-tetrahydroxybutlimidazole (THI), is a small molecule which has been previously shown to increase sphingosine-1-phosphate (S1P) expression, has a 4 fold increase in the number of cell expressing myf5, a protein that plays a key role in regulating myogenesis. More importantly, THI treated cells showed a 3.6 fold increase in the number of muscle cell fibers as revealed by an embryonic myosin heavy chain (eMyHC) stain. These observations indicate an increase in muscle proliferation and growth, suggesting muscle healing.
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992320/)

* Teslexivir is an antiviral agent for condyloma. Topical gel teslexivir is an antiviral agent that inhibits the interaction between viral proteins E1 and E2, an essential process for human papillomavirus (HPV) types 6 and 11, responsible for more than 90% of genital warts.

* Trichostatin A (TSA) is an organic compound that serves as an antifungal antibiotic and selectively inhibits the class I and II mammalian histone deacetylase (HDAC) families of enzymes, but not class III HDACs (i.e., sirtuins). However, there are recent reports of the interactions of this molecule with Sirt 6 protein. TSA inhibits the eukaryotic cell cycle during the beginning of the growth stage. TSA promotes the macrophage M2 phenotype by enhancing autophagy to reduce systemic inflammation and ultimately improves the survival of mice with polymicrobial sepsis. TSA inhibited uterine histomorphologic alterations induced by cigarette smoke exposure. The TSA effect might be associated with resumption of macro-autophagy via HDAC1/2 inhibition. Trichostatin A (TSA) was applied at an advanced stage of retinal degeneration, where essentially only a limited number of structurally collapsed cones were left. A single intravitreal injection afforded a long-term preservation of cone photoreceptors. TSA has a protective effect on the progression of eosinophilic meningitis -TSA treatment alleviated the loss of body weight, relieved the meningitis, and ameliorated cognitive impairments. TSA also has been used in the treatment of neurodegenerative or autoimmune diseases. TSA can be used to alter gene expression by interfering with the removal of acetyl groups from histones (histone deacetylases, HDAC) and therefore altering the ability of DNA transcription factors to access the DNA molecules inside

chromatin. It is a member of a larger class of histone deacetylase inhibitors (HDIs or HDACIs) that have a broad spectrum of epigenetic activities. Thus, TSA has some potential as an anti-cancer drug.

* Ursolic acid-Tomatidine appear to have a lot of potential as tools for dealing with muscle weakness and atrophy during aging. By reducing ATF4 activity, ursolic acid and tomatidine allow skeletal muscle to recover from effects of aging. The protein, ATF4, is a transcription factor that alters gene expression in skeletal muscle, causing reduction of muscle protein synthesis, strength, and mass. Elderly mice with age-related muscle weakness and atrophy were fed diets lacking or containing either 0.27 percent ursolic acid, or 0.05 percent tomatidine for two months. The scientists found that both compounds increased muscle mass by 10 percent, and more importantly, increased muscle quality, or strength, by 30 percent. The sizes of these effects suggest that the compounds largely restored muscle mass and strength to young adult levels.

1.3.1.36 RT-MB-48

https://archive.org/details/Resonant_Therapy-Molecular_Biology_48

25-Hydroxyvitamin D2; Amitriptyline; Benzocaine; Butorphanol; Carvedilol; Ceruletide P eptide; Crotamiton; Ginkgolide B; Glycine; Guineensine; Gymnemic Acid-1; HIF1A-EPA S1 Factors; Harmine; Hirudin; JBSNF000088; LTF Factor; Landiolol; Mapracorat; NP-C 86; Nabiximols; Nagilactone B; Nalfurafine; Nicotinamide N-methyltransferase; Ozonate d Saline Solution; Pimecrolimus; Reproxalap; Resolvin E1; Serelaxin; Tempol

* 25-hydroxyvitamin D2 is a hydroxycalciol that is vitamin D2 in which the hydrogen at p osition 25 has been replaced by a hydroxy group. It has a role as a bone density conser vation agent, a nutraceutical and a human xenobiotic metabolite. It is a hydroxycalciol, a seco-ergostane and a vitamin D. It derives from a vitamin D2. Biologically active metabo lite of vitamin D2 which is more active in curing rickets than its parent. The compound is believed to attach to the same receptor as vitamin D2 and 25-hydroxyvitamin D3.

* Amitriptyline is a medicine primarily used to treat a number of mental illnesses. These i nclude major depressive disorder and anxiety disorders, and less commonly attention d eficit hyperactivity disorder (ADHD) and bipolar disorder. Other uses include prevention of migraines, treatment of neuropathic pain such as fibromyalgia and postherpetic neura lgia, and less commonly insomnia. It is in the tricyclic antidepressant (TCA) class and its exact mechanism of action is unclear. Common side effects include blurred vision, dry mouth, low blood pressure on standing, sleepiness, and constipation. Serious side effec ts may include seizures, an increased risk of suicide in those less than 25 years of age, urinary retention, glaucoma, and a number of heart issues. It should not be taken with M AO inhibitors or the medication cisapride. Amitriptyline may cause problems if taken duri ng pregnancy. Use during breastfeeding appears to be relatively safe. It is TGA-labeled i n Australia for migraine prevention, also in cases of neuropathic pain disorders, fibromy

algia and nocturnal enuresis. Amitriptyline is a popular off-label treatment for irritable bowel syndrome (IBS), although it is most frequently reserved for severe cases of abdominal pain in patients with IBS because it needs to be taken regularly to work and has a generally poor tolerability profile, although a firm evidence base supports its efficacy in this indication. Amitriptyline can also be used as an anticholinergic drug in the treatment of early-stage Parkinson's disease if depression also needs to be treated. Amitriptyline is the most widely researched agent for prevention of frequent tension headaches.

* Benzocaine is an ester local anesthetic commonly used as a topical pain reliever or in cough drops. It is the active ingredient in many over-the-counter anesthetic ointments such as products for oral ulcers. It is also combined with antipyrine to form A/B otic drops to relieve ear pain and remove earwax. Benzocaine is indicated to treat a variety of pain-related conditions. It may be used for: Local anesthesia of oral and pharyngeal mucous membranes (sore throat, cold sores, mouth ulcers, toothache, sore gums, denture irritation). Otic pain (earache). Surgical or procedural local anesthesia. Benzocaine is used as a key ingredient in numerous pharmaceuticals: Some glycerol-based ear medications for use in removing excess wax as well as relieving ear conditions such as otitis media and swimmers ear. Some condoms designed to prevent premature ejaculation. Benzocaine largely inhibits sensitivity on the penis, and can allow for an erection to be maintained longer (in a continuous act) by delaying ejaculation. Conversely, an erection will also fade faster if stimulus is interrupted. Benzocaine mucoadhesive patches have been used in reducing orthodontic pain. In Poland it is included, together with menthol and zinc oxide, in the liquid powder (not to be confused with the liquid face powder) used mainly after mosquito bites.

* Butorphanol is a morphinan-type synthetic agonist–antagonist opioid analgesic most closely structurally related to levorphanol. The most common indication for butorphanol is management of migraine. It may also be used parenterally for management of moderate-to-severe pain, as a supplement for balanced general anesthesia, and management of pain during labor. Butorphanol is also quite effective at reducing post-operative shivering (owing to its Kappa agonist activity). Butorphanol is more effective in reducing pain in women than in men. As with other opioid analgesics, central nervous system effects (such as sedation, confusion, and dizziness) are considerations with butorphanol. Nausea and vomiting are common. Less common are the gastrointestinal effects of other opioids (mostly constipation). Another side effect experienced by people taking the medication is increased perspiration. In veterinary anesthesia, butorphanol is widely used as a sedative and analgesic in dogs, cats and horses.

* Carvedilol is a medication used to treat high blood pressure, congestive heart failure (CHF), and left ventricular dysfunction in people who are otherwise stable. For high blood pressure, it is generally a second-line treatment. Common side effects include dizziness, tiredness, joint pain, low blood pressure, nausea, and shortness of breath. Severe side effects may include bronchospasm. Safety during pregnancy or breastfeeding is unclear. Use is not recommended with liver problems. Carvedilol is a nonselective beta blocker and alpha-1 blocker. How it improves outcomes is not entirely clear but may involve dilation of blood vessels. Carvedilol is indicated in the

management of congestive heart failure (CHF), commonly as an adjunct to angiotensin-converting-enzyme inhibitor (ACE inhibitors) and diuretics. It has been clinically shown to reduce mortality and hospitalizations in people with CHF. The mechanism behind its positive effect when used long-term in clinically stable CHF patients is not fully understood, but is thought to contribute to remodeling of the heart, improving upon its structure and function. In addition, carvedilol is indicated in the treatment of hypertension and to reduce risk of mortality and hospitalizations in a subset of people following a heart attack. It can be used alone or with other anti-hypertensive agents. According to the FDA, carvedilol should not be used in people with bronchial asthma or bronchospastic conditions. It should not be used in people with second- or third-degree AV block, sick sinus syndrome, severe bradycardia (unless a permanent pacemaker is in place), or a decompensated heart condition. People with severe hepatic impairment are also advised to not take carvedilol. Carvedilol has been reported in low dose to result in resolution and long-term remission of the red scrotum syndrome.

* Ceruletide Peptide also known as cerulein or caerulein, is a ten amino acid oligopeptide that stimulates smooth muscle and increases digestive secretions. Ceruletide is similar in action and composition to cholecystokinin. It stimulates gastric, biliary, and pancreatic secretion; and certain smooth muscle. It is used in paralytic ileus and as diagnostic aid in pancreatic malfunction. It is used to induce pancreatitis in experimental animal models. Caerulein appears to be an effective agent in relieving biliary colic through a relaxation of Oddi's sphincter, and may be used in ultrasound differential diagnostics of terminal bile duct obstruction. Caerulein relieved renal colic in 75% of the examined patients; it is suggested that the effect of caerulein in this syndrome is due to central analgesic action.

* Crotamiton is a drug that is used both as a scabicidal (for treating scabies) and as a general antipruritic (anti-itching drug). It is a prescription, lotion-based medicine that is applied to the whole body to get rid of the scabies parasite that burrows under the skin and causes itching. Crotamiton is toxic to the scabies mite, The mechanism of action of crotamiton as a general antipruritic was reported, in which crotamiton inhibits TRPV4 (transient receptor potential vanilloid 4) channel that is expressed in the skin, primary sensory neurons, and so on. The most common side effect of crotamiton is skin irritation.

* Ginkgolide B is a diterpenoid compound belonging to the group of ginkgolides, isolated from Ginkgo biloba leaves, exhibiting a wide spectrum of pharmacological properties and is used for the treatment of Alzheimer′s disease, cerebral insufficiency and memory loss. Antiinflammatory activity of G. biloba extracts is due to the presence of ginkgolides B that inhibits the platelet activating factors. This extract plays an important role in the pathogenesis of asthma. Ginkgolide B effectively inhibits the increase of T-helper 2 cytokines (which are interleukin IL-13 and IL-5), in bronchovascular lavage fluid by decreasing eosinophils count. It also inhibited the mucus hypersecretion by goblet cell and ovalbumin-induced eosinophils in lung tissue in the airway. It was concluded in a previous study that ginkgolides B is the most effective component in asthma treatments. Platelet-activating factor (PAF), a potent phospholipid inflammatory mediator, enhances

glutamatergic exdtatory synaptic transmission in the hippocampus, ginkgolide B demonstrates protective effects against glutamate neurotoxidty involving PAF. Ginkgolide B caused a dose-related protection against dysrhythmias; the antiarrhythmic effect of ginkgolide B was comparable to that of diltiazem and superior to the activity of metoprolol. Ginkgolide B also caused a significant increase in cell viability and a highly significant decrease in the numbers of both spontaneously occurring and some induced apoptoses. Ginkgolide B has potent neuroprotective, anti-arrhythmias, anti-inflammatory and anti-apoptotic effects, it might be a promising drug on inhibiting platelet function and reducing inflammation in atherosclerosis. Additionally, this compound has been reported to inhibit neutrophil degranulation in vitro. Inhibits superoxide production in vitro and inhibits bronchoconstriction and is neuroprotective following oral administration in vivo. Extensive evidences has shown the promising effects of Ginkgo biloba consumption on several diseases such as Alzheimer's and Parkinson’s diseases, and ischemic stroke, etc. Several studies also have reported its beneficial role on motor activity and cognitive functions. This species contain a unique class of diterpenes, namely Ginkgolide B, which possess several pharmacological activities such as protective effect against cardiovascular disease; the most important causes of death worldwide. The promising effects of Ginkgolide B on stroke, both ischemic and hemorrhagic, are suggested by an overwhelming body of scientific evidences.

* Glycine can have a cooling effect on the brain and body. Glycine has been associated with a decrease in the body’s core temperature. As body temperature declines, so does heat production, followed by an increase in heat loss. All three of these thermoregulation techniques are the body’s way of promoting sleep onset and slow brain wave activity. Conversely, the body’s core temperature begins to increase a few hours prior to waking. In a study on levels of glycine and sleep efficacy, researchers observed that glycine plays a significant role in alleviating symptoms of fatigue in people with poor sleep. Glycine may also be able to offer protection against the atherosclerotic process to boost heart health. Glycine modulates blood glucose levels in normal adults and those with blood glucose sensitivity problems. Glycine is widely used for treating schizophrenia, stroke, benign prostatic hyperplasia (BPH), and some rare inherited metabolic disorders. It is also used to protect kidneys from the harmful side effects of certain drugs used after organ transplantation as well as the liver from harmful effects of alcohol. Other uses include cancer prevention and memory enhancement.

* Guineensine inhibits the cellular reuptake of anandamide and 2-arachidonoylglycerol in a mouse model. This causes an increase in the activity of the two neurotransmitters which are classified as endogenous cannabinoids. Guineesine can dose-dependently produce cannabimimetic effects in a mouse model which are indicated by potent catatonic, analgesic, hypo-locomotive and hypo-thermic effects. In addition, the analgesic and catatonic effects were reversed by the cannabinoid receptor type 1 (CB1) inverse agonist rimonabant. Guineesine is also a monoamine oxidase inhibitor (MAOI) in vitro. Recently researchers proposed that guineensine can be an efficient compound in the management of neuropathic pain resulting from the damage of neurons. Rearchers have reported the larvicidal activity of guineensine against larvae of Culex pipiens pallens, Aedes aegypti, and A. togoi, which are among the medically important

mosquitoes. In another study, researchers found that guineensine significantly inhibits indomethacin-induced gastric lesions.

* Gymnemic Acid-1 is a substance of plant origin that helps people who often abuse sweet foods to contain themselves. Gymnemic acid, can make a cookie taste like cardboard, solutions sweetened with sugar taste like water. Chemically, gymnemic acids are triterpenoid glycosides. The central structure is the aglycone gymnemagenin. This is adorned with a sugar such as glucuronic acid and with various ester groups. These variations give rise to the different gymnemic acids. More than 20 homologs of gymnemic acid are known.Gymnemic acid 1 has the highest anti-sweet properties. It suppresses the sweetness of most of the sweeteners including intense artificial sweeteners such as aspartame and natural sweeteners such as thaumatin, a sweet protein. The anti-sweet activity is reversible, but sweetness recovery on the tongue can take more than 10 minutes. Its consumption considerably reduces cravings to eat something sweet. It has the potential to help people reduce their sugar intake.

* HIF1A-EPAS1 Factors. The balance between hypoxia-inducible factor-1alpha and hypoxia-inducible factor-2alpha activity in keratinocytes controls skin perfusion, systemic thermoregulation, and systemic blood pressure by nitric oxide-dependent mechanisms. Furthermore, the skin accumulates sodium (Na) which generates a barrier to promote immunological host defense. Immune cells control skin Na metabolism and the clearance of Na via the lymphatic system. Reduced lymphatic clearance increases blood pressure.

* Harmine is a fluorescent harmala alkaloid belonging to the beta-carboline family of compounds. Harmine acts as a cell-type-specific regulator of PPARgamma expression. Administration of harmine to diabetic mice mimics the effects of PPARgamma ligands on adipocyte gene expression and insulin sensitivity. Unlike thiazolidinediones, however, harmine does not cause significant weight gain or hepatic lipid accumulation. Molecular studies indicate that harmine controls PPARgamma expression through inhibition of the Wnt signaling pathway. Harmine is currently the only known drug that induces proliferation (rapid mitosis and subsequent mass growth) of pancreatic alpha and beta cells in adult humans. These islet sub-cells are normally very resistant to growth stimulation in the adult stage of a human's life, as the cell mass plateaus at around age 10 and remains virtually unchanged from there on. Harmine reversibly inhibits monoamine oxidase A (MAO-A), an enzyme which breaks down monoamines, making it a RIMA. Harmine selectively binds to MAO-A but does not inhibit the variant MAO-B. Monoamines include neurotransmitters (serotonin, dopamine), hormones (melatonin, epinephrine, norepinephrine). By slowing the breakdown of neurotransmitters, monoamine oxidase inhibitors (MAOIs) can help to replenish the body's supply of these chemicals, and many MAOIs are used as antidepressants. Harmine showed cytotoxicity against HL60 and K562 cell lines in cancer. This could explain the cytotoxic effect of P. harmala on these cells. Harmine was shown to promote differentiation of osteoblasts (bone-forming cells), and chondrocytes (cells in the cartilage). It was also shown to inhibit osteoclastogenesis (the formation of bone resorbing cells).

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* Hirudin is the most potent natural inhibitor of thrombin. Unlike antithrombin, hirudin binds to and inhibits only the activated thrombin, with a specific activity on fibrinogen. Therefore, hirudin prevents or dissolves the formation of clots and thrombi (i.e., it has a thrombolytic activity), and has therapeutic value in blood coagulation disorders, in the treatment of skin hematomas and of superficial varicose veins, either as an injectable or a topical application cream. In some aspects, hirudin has advantages over more commonly used anticoagulants and thrombolytics, such as heparin, as it does not interfere with the biological activity of other serum proteins, and can also act on complexed thrombin.

* JBSNF000088 inhibits Nicotinamide N-methyltransferas (NNMT) activity, reduces 1-methyl-nicotinamide (MNA) levels and drives insulin sensitization, glucose modulation and body weight reduction in animal models of metabolic disease.

* LTF Factor or Lactoferrin is one of the components of the immune system of the body; it has antimicrobial activity (bacteriocide, fungicide) and is part of the innate defense, mainly at mucoses. In particular, lactoferrin provides antibacterial activity to human infants. Apart from its main biological function, namely binding and transport of iron ions, lactoferrin also has antibacterial, antiviral, antiparasitic, catalytic, anti-cancer, and anti-allergic functions and properties. Lactoferrin has shown to have positive effects on bone turnover. It has aided in decreasing bone resorption and increasing bone formation. This was indicated by a decrease in the levels of two bone resorption markers (deoxypyridinoline and N-telopeptide) and an increase in the levels two bone formation markers (osteocalcin and alkaline phosphatase). It has reduced osteoclast formation, which signifies a decrease in pro-inflammatory responses and an increase in anti-inflammatory responses which indicates a reduction in bone resorption as well.

* Landiolol is an ultra short-acting, beta1-superselective intravenous adrenergic antagonist, which decreases the heart rate effectively with less negative effect on blood pressure or myocardial contractility. In comparison to other betablockers, landiolol has the shortest elimination half-life (3 to 4 minutes), ultra-rapid onset of effect (heart rate begins to decrease immediately after completion of administration), and predectible effectiveness with inactive metabolites (heart rate returns to baseline levels at 30 min after completion of landiolol hydrochloride administration). The pure S-enantiomer structure of landiolol is believed to develop less hypotensive side effects in comparison to other betablockers. This has a positive impact on the treatment of patients when reduction of heart rate without decrease in arterial blood pressure is desired. Landiolol is indicated as an antiarrhythmic agent for supraventricular tachycardia and for the rapid control of ventricular rate in patients with atrial fibrillation or atrial flutter in perioperative, postoperative, or other circumstances where short-term control of the ventricular rate with a short acting agent is desirable. Non-compensatory sinus tachycardia where, in the physician’s judgment the rapid heart rate requires specific intervention. Additionally, landiolol has been approved for the treatment of ventricular fibrillation or ventricular tachycardia. Landiolol may be cardio-protective in septic shock by normalizing coronary

microcirculation through blockage of sepsis-induced decrease in expression of VEGF signaling system but independent of inflammatory cytokines. In sepsis patients, landiolol reduced new-onset arrhythmia and kept patients within the target heart rate range. Furthermore, landiolol demonstrated a positive clinical impact regarding ventilation-free days, ICU-free days and hospital-free days. Patients in the landiolol group had a survival rate of 88% by day 28, in contrast to a mortality rate of 20% in the control group by day 28. These are very important findings which may include landiolol in the standard of care for sepsis patients, since tachycardia and atrial fibrillation are key prognostic factors for sepsis. Additionally, tachycardia exceeding 100 beats per min (bpm) on admission to an intensive care unit (ICU) is a risk factor for worsening prognosis. Landiolol is a promising drug to manage postoperative atrial fibrillation in non-cardiac surgery with a profile that allow for control of heart rate with minimal impact on blood pressure. Landiolol has limited negative inotropic effect and is well tolerated by the respiratory system.

* Mapracorat is an anti-inflammatory drug belonging to the experimental class of selective glucocorticoid receptor agonists (SEGRAs). It is in clinical trials for the topical treatment of atopic dermatitis, inflammation following cataract surgery, and allergic conjunctivitis. Preliminary investigation for the treatment of keratoconjunctivitis sicca has been conducted in cellular models.

* NP-C86 can stabilize GAS5 levels in DM adipocytes and restore insulin-mediated glucose uptake in DM adipocytes. GAS5 regulates insulin signaling in adipocytes, manifesting its potential as novel ncRNA target for T2DM. NP-C86 restored insulin-mediated glucose uptake in DM adipocytes. NP-C86 stabilizes GAS5 levels to normal physiological concentrations demonstrating high therapeutic potential. Results show that NP-C86 is non-cytotoxic, is efficiently taken up by cells and binds to GAS5 with high affinity and specificity.
(DOI:https://doi.org/10.1016/j.chembiol.2018.11.012)

* Nabiximols is an herbal preparation containing a defined quantity of specific cannabinoids formulated for oromucosal spray administration with potential analgesic activity. Nabiximols is sold as a mouth spray intended to alleviate neuropathic pain, spasticity, overactive bladder, and other symptoms of multiple sclerosis. Nabiximols contains a standardized extract of tetrahydrocannabinol (THC), the non-psychoactive cannabinoid cannabidiol (CBD), other minor cannabinoids, flavonoids, and terpenes from two cannabis plant varieties. Cannabinoids interact with G protein-coupled cannabinoid 1 (CB1) receptors in the central nervous system, resulting in analgesic, euphoric, and anticonvulsive effects.

* Nagilactone B (NLB), a small molecule extracted from the root bark of Podocarpus nagi (Podocarpaceae), suppresses atherosclerosis in an atherosclerotic mouse model. Selective LXR activation in macrophages with NLB induces ABCA1- and ABCG1-mediated cholesterol efflux while exerting minimal effects on lipogenesis and lipid accumulation in liver, resulting in regression of atherosclerosis, and therefore might be a promising strategy for therapeutics.

* Nalfurafine is an antipruritic (anti-itch drug) for the treatment of uremic pruritus in individuals with chronic kidney disease undergoing hemodialysis. It acts as a potent, selective, centrally-penetrant κ-opioid receptor (KOR) agonist, and is the first and curren tly the only selective KOR agonist to have been approved for clinical use.

* Nicotinamide N-methyltransferase (NNMT) inhibitor promotes myoblast differentiation i n C2C12 cells. Activates senescent muscle stem cells (muSCs) and improves regenerat ive capacity of aged skeletal muscle. Enhances proliferation, fusion and regenerative ca pacity of muSCs in aged mice.

* Ozonated Saline Solution is ozone, oxygen, sodium chloride and water. The complem entary treatment with ozonated saline improves oxygen metabolism, reduces oxidative s tress, acts as a "powerful anti-inflammatory" and as an antiplatelet agent that prevents t hrombus formation. According to a spanish study's conclusions, this treatment with ozon e therapy would also help treat collateral damage caused by the coronavirus, such as p ulmonary thrombi. It does not solve pulmonary fibrosis because it is scarring in the lung, it is dead tissue and that cannot be recovered, but it can optimize oxygenation, oxygen metabolism and help that patient to have a blood more oxygenated, improve the quality of life. It is not recommended for everyone. Those excluded are people suffering from fa vism, a disease that tends to bleed due to a lack of phosphate dehydrogenase, pregnan t women, people who have had a recent acute myocardial infarction, and those with ong oing epileptic states. The protocol consisted of 10 days of treatment, but that was the th eory, because the practice was much faster. The patients responded very quickly and n one of them received the 10 treatments, therefore, the recycling of treatment was much greater. On the fifth day we were already discharging, with low-risk laboratories, they we re not cured, but with low-risk laboratories that allowed them to continue their outpatient follow-up, isolated at home. The one who received the most treatment reached eight do ses and no more was needed. In addition to applying it as a supportive treatment, the m edical team led by Dr. Schwartz also used it prophylactically. "We developed a prophyla ctic protocol that was made for all exposed health personnel, those who were in the fron t line, ourselves and even our families. Here nothing was improvised and none got sick." Besides killing 99% of viruses, yeast and protozoa, fungi and bacteria in the air, ozone c an help with cancer, aging, infections and more.

* Pimecrolimus is an immunomodulating agent of the calcineurin inhibitor class used in t he treatment of atopic dermatitis (eczema). It has been proven to be effective in various inflammatory skin diseases, e.g., seborrheic dermatitis, cutaneous lupus erythematosus, oral lichen planus, vitiligo, and psoriasis. Pimecrolimus is an ascomycin macrolactam d erivative. It has been shown in vitro that pimecrolimus binds to FKBP1A and also inhibit s calcineurin. Thus pimecrolimus inhibits T-cell activation by inhibiting the synthesis and release of cytokines from T-cells. Pimecrolimus also prevents the release of inflammator y cytokines and mediators from mast cells. In contrast with topical steroids, pimecrolimu s does not produce skin atrophy.

* Reproxalap is an immune-modulating reactive aldehyde species (RASP) inhibitor that

works by covalently binding to free aldehydes and diminishing excessive RASP levels, which are generally elevated in ocular and systemic inflammatory disease. Reproxalap offers a new mechanism for reducing ocular inflammation in allergic conjunctivitis, dry e ye disease, and anterior uveitis.

* Resolvin E1(1-) is an icosanoid anion resulting from the removal of a proton from the c arboxy group of resolvin E1; major species at pH 7.3. It has a role as a human xenobioti c metabolite and an anti-inflammatory agent. It is an icosanoid anion, a hydroxy fatty aci d anion, a long-chain fatty acid anion and a polyunsaturated fatty acid anion. It is a conj ugate base of a resolvin E1. Resolvins are under preliminary research for their involvem ent in promoting restoration of normal cellular function following the inflammation that oc curs after tissue injury.

* Serelaxin is a medication marketed for the treatment of acute heart failure (AHF), targ eting the relaxin receptor. Serelaxin is a recombinant form of human relaxin-2, a hormon e that (among other functions) is produced during pregnancy and mediates the haemod ynamic changes that occur during this time,such as increased blood output of the heart and blood flow in the kidney. Human-relaxin-2 mediates vasodilation (widening of blood vessels) by increasing the production of nitric oxide (NO), a potent vasodilator. Relaxin c auses vasodilation by an indirect mechanism, where it inhibits the potent vasoconstricto rs angiotensin II and endothelin. In addition to vasodilation, the effects of relaxin are als o seen in the kidneys, by significantly increasing creatinine clearance, which is a measu re of kidney function, as well as increased renal blood flow. Relaxin also functions as a c ardiac stimulant. Studies have demonstrated that relaxin increases calcium sensitivity of cardiac myofilaments as well as increasing phosphorylation of the myofilaments by prot ein kinase C (PKC). These modifications both function to increase the force generated b y the myofilaments without increasing the energy consumption of the cardiac myocytes. Thus relaxin and serelaxin can increase stroke volume, the amount of blood pumped pe r heart beat, without increasing the energy demand on the already strained heart of acut e heart failure patients.

* Tempol, also known as 4-hydroxy-TEMPO, is a stable, synthetic compound that mimic s the superoxide dismutase enzyme. This enzyme helps to increase the rate of breakdo wn of the superoxide radical into oxygen or hydrogen peroxide. Tempol may protect aga inst radiation and is used as a chemical antioxidant. Tempol restores the effects of the c ytokine TNF-alpha, which is involved in immune function and acute inflammation. In rats, Tempol decreased blood pressure and the activity of the fight-or-flight (sympathetic) ner vous system. It has the potential to improve diseases caused by oxidative stress, partic ularly diabetes and its complications such as high blood pressure, coronary heart diseas e, and kidney damage. Tempol acts in a similar way to the superoxide dismutase: it prev ents the production of free radicals through oxidation of iron. Tempol produced regressio n of Crohn’s Disease, improved cutaneous thermal hyperemia, and may protect tissue a round the base of the cornea.

* Theophylline is a methylxanthine drug used in therapy for respiratory diseases such as chronic obstructive pulmonary disease (COPD) and asthma. The main actions of theoph

ylline involve: relaxing bronchial smooth muscle, increasing heart muscle contractility an d efficiency (positive inotrope), increasing heart rate (positive chronotropic), increasing b lood pressure, increasing renal blood flow, anti-inflammatory effects, central nervous sy stem stimulatory effect mainly on the medullary respiratory center. The main therapeutic uses of theophylline are aimed at: chronic obstructive pulmonary disease (COPD), asth ma, infant apnea, blocks the action of adenosine; an inhibitory neurotransmitter that ind uces sleep, contracts the smooth muscles and relaxes the cardiac muscle. A clinical stu dy reported that theophylline was helpful in improving the sense of smell in study subjec ts with anosmia. Another small clinical study compared theophylline to methylphenidate for the treatment of attention-deficit hyperactivity disorder in children and adolescents. T he use of theophylline is complicated by its interaction with various drugs and by the fac t that it has a narrow therapeutic window. Its use must be monitored by direct measurem ent of serum theophylline levels to avoid toxicity. It can also cause nausea, diarrhea, inc rease in heart rate, abnormal heart rhythms, and Central Nervous System excitation (he adaches, insomnia, irritability, dizziness and lightheadedness). Seizures can also occur i n severe cases of toxicity, and are considered to be a neurological emergency.

1.3.1.37 RT-MB-49

https://archive.org/details/Resonant_Therapy-Molecular_Biology_49

Appetite Stimulation; Bezafibrate; Chenodeoxycholic acid; Cholestyramine; Cynnamald ehyde; DMSA-DMPS; Duloxetine; Elobixibat; Ezetimibe; Ferric Derisomaltose-Hydroxyt yrosol; GC376; IM176OUT05; IMU-838; Ichthammol; Lorecivivint; MSM; Methane-Rich Saline Solution; NYX-2925; Nimbolide; Omeda-3 Derived SPMs; Pinabulin; Rifampicin; SH-11037; Sertraline; Sleeping Aid; Sodium Butyrate; Sodium Phenylbutyrate; TUDCA; Urolithin-B; Volixibat

* Appetite Stimulation is a mix oriented to those elderly with increasing appetite loss. Th e products play (3m) in this order.
-Hinokitiol for iron uptake in the gut and hemoglobin production
-Monosodium Glutamate Salt for taste titillation
-Vitamin B9 as Methylfolate
-Vitamin B7 as Biotin
-Vitamin B6 as Pyridoxal 5′-phosphate (PLP)
-Vitamin B3 as Nicotinamide Adenine Dinucleotide
-VitaminB2 as Flavin Mononucleotide + Flavin Adenine Dinucleotide
-Vitamin B1 as Thiamine Tetrahydrofurfuryl Disulfide
-Vitamin A as Retinal
-Zinc Bisglycinate + Copper Citrate

* Bezafibrate is a fibrate drug used as a lipid-lowering agent to treat hyperlipidemia. It helps to lower LDL cholesterol and triglyceride in the blood, and increase HDL.

Bezafibrate improves markers of combined hyperlipidemia, effectively reducing LDL and triglycerides and improving HDL levels. The main effect on cardiovascular morbidity is in patients with the metabolic syndrome, the features of which are attenuated by bezafibrate. Studies show that in patients with impaired glucose tolerance, bezafibrate may delay progress to diabetes, and in those with insulin resistance it slowed progress in the HOMA severity marker. In addition, a prospective observational study of dyslipidemic patients with diabetes or hyperglycemia showed that bezafibrate significantly reduces haemoglobin A1c (HbA1c) concentration as a function of baseline HbA1c levels, regardless of concurrent use of antidiabetic drugs. The main toxicity is hepatic (abnormal liver enzymes); myopathy and on rare occasions rhabdomyolysis have been reported.

* Chenodeoxycholic acid has been used as medical therapy to dissolve gallstones. Medical therapy with oral bile acids has been used in patients who have small cholesterol stones, and for patients with larger cholesterol gallstones who are unable or reluctant to have surgery. CDCA treatment can cause diarrhea, mild reversible hepatic injury, and a small increase in the plasma cholesterol level. CDCA can be used in the treatment of cerebrotendineous xanthomatosis. CDCA has been used in several other conditions. As diarrhea is frequent when CDCA is used in gallstone dissolution, it has been studied as a possible treatment for constipation and has been shown to accelerate colonic transit and improve bowel function.

* Cholestyramine is a bile acid sequestrant, which binds bile in the gastrointestinal tract to prevent its reabsorption. It is a strong ion exchange resin, which means it can exchange its chloride anions with anionic bile acids in the gastrointestinal tract and bind them strongly in the resin matrix. The functional group of the anion exchange resin is a quaternary ammonium group attached to an inert styrene-divinylbenzene copolymer. Cholestyramine removes bile acids from the body by forming insoluble complexes with bile acids in the intestine, which are then excreted in the feces. As a result of this loss of bile acids, more plasma cholesterol is converted to bile acids in the liver to normalise levels. This conversion of cholesterol into bile acids lowers plasma cholesterol levels. Bile acid sequestrants such as cholestyramine were first used to treat hypercholesterolemia, but since the introduction of statins, now have only a minor role for this indication. They can also be used to treat the pruritus, or itching, that often occurs during liver failure and other types of cholestasis where the ability to eliminate bile acids is reduced. Cholestyramine is commonly used to treat diarrhea resulting from bile acid malabsorption. Colestyramine is also used in the control of other types of bile acid diarrhea.

* Cynnamaldehyde is an organic compound ocurring naturally which gives cinnamon its flavor and odor. The essential oil of cinnamon bark is about 90% cinnamaldehyde. Cinnamaldehyde is a potent inducer of apoptosis via ROS-mediated mitochondrial permeability transition in human promyelocytic leukemia HL-60 cells. Some early evidence shows that cinnamaldehyde blocks formation of Tau protein aggregation into neurofibrillary tangles, a major pathology in Alzheimer's Disease. Cinnamaldehyde has antimicrobial properties. Cinnamaldehyde is also a TRPA1 activator, and can excite a

subset of sensory neurons that are mainly cold-sensitive neurons, to cause nociceptive behavior in mice. Cinnamaldehyde has been found to improve metabolic health by acting directly on adipocytes and inducing them to start burning energy through a process called thermogenesis. Scientists had previously observed that cinnamaldehyde appeared to protect mice against obesity and hyperglycemia, but the mechanisms underlying these effects were not well understood. Researchers are currently investigating cinnamaldehyde as a potential anti-obesity drug. Cynnamaldehyde also activates TMEM16A channels by elevating the intracellular concentrations of calcium ions. Calcium-activated chloride channels (CaCCs) mediate diverse physiology in cells, which play important roles in neuronal and cardiac excitability, transduction of nerves, contraction of smooth muscle, epithelial Cl − secretion and fertilization. Diseases including cystic fibrosis, asthma, hypertension, diarrhea, gastrointestinal hypomotility disorders and various cancers are involved in CaCCs dysfunction.

* DMSA-DMPS are two important antidotes for heavy metal poisoning. Meso-dimercaptosuccinic acid (DMSA) and 2,3-dimercapto-l-propanesulfonic acid, Na salt (DMPS). These two dimercapto compounds are effective in treating poisoning by compounds of arsenic, lead, organic and inorganic mercury, and other heavy metals.They have been used for this purpose in humans and in experimental animals. When used in therapeutic or reasonable experimental doses, neither DMSA or DMPS appears to have any marked effect on the trace metals in the body except that urinary excretion of Cu and Zn increase. The effects on Cu and Zn are dose-dependent and return to normal if the drugs are stopped. As an arsenic antidote for mice, the therapeutic index of DMSA is 3 times greater than that for DMPS. It appears that DMSA is more effective than DMPS in removing mercury from the body. DMSA appears to remove more organic mercury, whereas DMPS removes more inorganic mercury. A combination of DMSA and DMPS removes mercury from most organs.

* Duloxetine is a medication used to treat major depressive disorder, generalized anxiety disorder, fibromyalgia, chronic musculoskeletal pain and neuropathic pain. Common side effects include dry mouth, nausea, feeling tired, dizziness, agitation, sexual problems, and increased sweating. Severe side effects include an increased risk of suicide, serotonin syndrome, mania, and liver problems. Antidepressant withdrawal syndrome may occur if stopped. There are concerns that use during the later part of pregnancy can harm the baby. It is a serotonin–norepinephrine reuptake inhibitor. How it works is not entirely clear.

* Elobixibat is an inhibitor of the ileal bile acid transporter (IBAT), undergoing development in clinical trials for the treatment of chronic constipation and irritable bowel syndrome with constipation (IBS-C). IBAT is the bile acid:sodium symporter responsible for the reuptake of bile acids in the ileum which is the initial step in the enterohepatic circulation. By inhibiting the uptake of bile acids, elobixibat increases the bile acid concentration in the gut, and this accelerates intestinal passage and softens the stool. Following several phase II studies, it is now undergoing phase III trials.

* Ezetimibe is a cholesterol absorption blocker. It inhibits the absorption of cholesterol

from the small intestine and decreases the amount of cholesterol normally available to liver cells, leading them to absorb more from circulation and thus lowering levels of circulating cholesterol. It is indicated as an adjunct to diet for primary hyperlipidemia, mixed hyperlipidemia, homozygous familial hypercholesterolemia (HoFH), homozygous sitosterolemia (phytosterolemia).

* Ferric Derisomaltose Hydroxytyrosol. Ferric derisomaltose is a medication for the treatment of iron deficiency anemia (IDA) in adults who have intolerance to oral iron or have had unsatisfactory response to oral iron or who have non-hemodialysis dependent chronic kidney disease (NDD-CKD). Hydroxytyrosol is included as a Vitamin C source since ascorbic acid enhances iron absorption.

* GC376 is a broad-spectrum antiviral medication under development for therapeutic uses in humans and animals. As of 2020, GC376 is being investigated as treatment for COVID-19. GC376 shows activity against many human and animal viruses including coronavirus and norovirus; the most extensive research has been multiple in vivo studies in cats treating a coronavirus which causes deadly feline infectious peritonitis. Other research supports use in porcine epidemic diarrhea virus. Since GC376 shows broad-spectrum activity against coronavirus, early on during the pandemic of 2020 it was suggested as a potential treatment for COVID-19. In response to the crisis, researchers published in vitro research indicating GC376 is highly active against 3CLpro in SARS-CoV-2 (the coronavirus which causes COVID-19). Another group of virologists at the University of Alberta lead then released a separate publication confirming GC376's activity against 3CLpro in SARS-CoV-2 and also indicating GC376 had a potent antiviral effect.

* IM176OUT05 (IM) facilitated stemness induction and maintenance during an induced pluripotent stem cell generation process. IM treatment mildly inhibited mitochondrial oxidative phosphorylation and concurrently increased glycolysis, which accelerated stemness induction during the early phase of reprogramming. More importantly, the topical application of IM accelerated hair follicle regeneration by stimulating the progression of the hair follicle cycle to the anagen phase and increased the hair follicle number in mice. Furthermore, the stem cell population with a glycolytic metabotype appeared slightly earlier in the IM-treated mice. Stem cell and niche signaling involved in the hair regeneration process was also activated by the IM treatment during the early phase of hair follicle regeneration. Overall, these results show that the novel small molecule IM promotes tissue regeneration, specifically in hair regrowth, by restructuring the metabolic configuration of stem cells.

 * IMU-838 (vidofludimus calcium) is a small molecule investigational drug under development for the treatment of relapsing-remitting multiple sclerosis, or RRMS, inflammatory bowel disease, or IBD, and other chronic inflammatory and autoimmune diseases. IMU-838 works by blocking the activity of an enzyme called dihydroorotate dehydrogenase (DHODH). This is believed to reduce the activity of B-cells and T-cells, immune cells that drive inflammation that can damage the nervous system in multiple sclerosis. In animal studies of IMU-838, animals treated with large doses of the active

moiety of IMU-838 were shown to lack detrimental effects on bone marrow, supporting the lack of an unspecific anti-proliferative effect regularly seen with many traditional immunomodulators. Based on the selectivity toward metabolically activated cells (with a high need for ribonucleic acid, or RNA, and deoxyribonucleic acid, or DNA, production), DHODH inhibition also leads to a direct antiviral effect, which has been demonstrated in various virus infected cells, such as influenza virus infections, cytomegolvirus infections and even hemorrhagic fever-causing viruses, such as Arenavirus. Treatment with IMU-838 may avoid virus reactivation, one of the major drawbacks of the long-term use of traditional immunomodulators. Efficacy of vidofludimus has been observed in several animal disease models for IBD, as well as systemic lupus erythematosus and transplant rejection. IMU-838 is also being investigated as a potential treatment for other diseases where an overactive immune system is thought to cause damage, including ulcerative colitis (a type of inflammatory bowel disease), primary sclerosing cholangitis and the coronavirus known as COVID-19.

* Ichthammol, also called Drawing Salve is used in medicine (sometimes in combination) as a treatment for different skin diseases, including eczema and psoriasis. Bituminosulfonates are classified as local therapeutic agents with very good tolerability. Pharmacologically, Ichthammol has anti-inflammatory, bactericidal, and fungicidal properties. It is used to treat a variety of skin disorders as e.g. eczema, psoriasis, Acne rosacea and acne, and it decreases microorganisms in the area surrounding a skin condition. It is also used to relieve the discomfort of plant irritations, painful bites and stings or draw out splinters from the skin. In animals with wounds, dry hooves, inflammations, skin ailments and skin irritations. In otology, a mixture of glycerol and ichthammol is used for the topical treatment of ear infections. It is effective against Gram-positive organisms. The anti-inflammatory action is explained by its influence on the formation, secretion, and effect of inflammation mediators.

* Lorecivivint, a small molecule Wnt pathway inhibitor promoted proliferation and differentiation of NP cells in vitro. In a rat model of Degenerative Disc Disease (DDD) , Lorecivivint regenerated NP cells and cartilage matrix, and improved disc height, health, and shape compared to vehicle, with minimal plasma exposure or systemic toxicity. These results suggested that Lorecivivint has potential as a treatment for DDD. Lorecivivint also shows potential to modify structure and improve symptoms of knee OA enhancing chondrogenesis, chondrocyte function, and anti-inflammation.

* MSM or Methylsulfonylmethane is an organosulfur compound commonly found in the atmosphere above marine areas. This organic sulfur-containing compound naturally occurs in some green vegetables and other food products, plus it’s found in the human body, in many animals, and in milk. It’s also a natural substance made from phytoplankton in the oceans. Sulfur is needed for many different critical bodily functions every single day, and MSM is considered a sulfur donor.
MSM can make the eye membranes more permeable, soften tissues in the eyes, decrease pressure, repair damaged membranes, and help the eyes utilize nutrients more easily. It can help treat conditions like skin irritation such as rosacea, allergic reactions, varicose veins and hemorrhoids. MSM helps decrease joint inflammation,

improves flexibility and restores collagen production. It can help form connective tissue and repair joints, tendons and ligaments. MSM may help treat osteoporosis and arthritis because it help the body form new joint and muscle tissue while lowering inflammatory responses that contribute to swelling and stiffness. Sulfur also impacts the immune system and facilitates normal cellular activity. Sulfur needs to be present for our cells to release many byproducts and excess fluids that can accumulate and cause swelling/tenderness. MSM can help rebuild the lining of the digestive tract and lower inflammatory responses in response to allergic reactions to certain foods. It's also useful for helping treat leaky gut syndrome since it can help stop particles from leaching out the gut through small junction openings, where they can enter the bloodstream and ignite an inflammatory response. This is due in part to the sulfur in MSM which is important for digestion. While it hasn't been proven in many studies, people also use it to hold on to a youthful appearance, since it seems to help prevent wrinkles, scar formation, dark spots and sun damage. Research suggests that MSM can act like a natural analgesic, helping prevent and treat muscle aches and pains, throbbing and swelling while improving range of motion and mobility. It helps repair the rigid fibrous tissue cells in our muscles that become broken down during exercise, therefore helping prevent them from swelling for prolong periods of time. It can also restore the flexibility and permeability of cell walls within muscles, which means nutrients can pass through the tissues more easily, facilitating repair work faster and removing lactic acid, which causes that "burning feeling" following exercise. MSM also works like an adaptogen, since it boosts our ability to heal and bounce back from exercise, stressful events, injuries and even surgeries. MSM has anti-atherosclerotic (preventing the hardening/thickening of arteries), chemo-preventative compound and natural anti-inflammatory effects.

* Methane-Rich Saline Solution is methane, sodium chloride and water. Methane is nontoxic and can penetrate cell membranes, and, is relatively stable. Therefore, methane has great clinical application prospects. Methane, one of the most abundant organic greenhouse gases found in the atmosphere, is detected in 30-50% of healthy adults worldwide. Methane has garnered increasing attention as a potential therapeutic against various diseases. Studies indicate that methane possesses important biological activity that can protect cells and organs from inflammation, oxidative stress, and cellular apoptosis. Previous studies have shown that methane-rich saline (MRS) plays a protective role in animal models of myocardial ischemia and in ischemia-reperfusion injury of the liver and kidney by exerting antioxidant, anti-inflammatory, and antiapoptotic effects.Hemorrhagic shock is a physiological condition accompanied by rapid blood loss. It is characterized by severe vasoconstriction, insufficient tissue perfusion, and cellular hypoxia. In response to decreased oxygen tension, oxidative phosphorylation decreases and anaerobic metabolism increases in an attempt to maintain the cellular energy. MRS alleviated organ dysfunction during hemorrhage shock and resuscitation. This likely occurred because MRS inhibited the expression of proinflammatory cytokines, decreased oxidative stress and apoptosis, and facilitated the expression and activity of SOD2 by activating the PGC-1alpha-SIRT3 signaling pathway. These findings suggest that MRS is a promising resuscitation fluid for patients with hemorrhage shock. Recently, the investigation of methane was conducted on

ischemia-reperfusion damage and diseases like sepsis, hepatitis, and pancreatitis. Hemorrhagic shock is caused by massive blood loss. If the patient is not fully resuscitated in time, this may eventually lead to multiple organ failure and even death. Previous studies on methane-rich saline in animal models showed that it confers resistance against many diseases.

* NYX-2925 is a novel N-methyl-d-aspartate (NMDA) receptor modulator. Brain activity in sleep deprived rats dosed with NYX-2925 demonstrated significantly facilitated slow wave sleep, suggesting NYX-2925 has the potential to improve sleep quality and decrease symptoms of sleep disruption caused by sleep deprivation. NYX-2925 can block hypersensitivity to pain in patients with fibromyalgia (FM), it also induced statistically significant changes on neuroimaging biomarkers, fatigue, and overall function. NYX-2925 significantly reduced levels of the excitatory neurotransmitter glutamate (glutamate/glutamine (Glx)) in the anterior cingulate and insula in the brain, this unique drug seemed to strike at the very heart of the central sensitization process occurring in FM. The drug also reduced the up-regulated pathways found between brain regions implicated in pain processing in FM.

* Nimbolide, a limonoid present in leaves of the neem tree (Azadirachta indica), has been reported to exhibit several medicinal properties. Nimbolide induces excessive generation of reactive oxygen species (ROS), thereby regulating both apoptosis and autophagy in pancreatic cancer cells. In vivo experiments also demonstrated that nimbolide was effective in inhibiting pancreatic cancer growth and metastasis. Nimbolide also has a role in Acute Respiratory Distress Syndrome (ARDS) characterized by an excessive acute inflammatory response in lung parenchyma, which ultimately leads to refractory hypoxemia. Nimbolide ameliorated TNF-alpha-regulated NF-κB and HDAC-3 crosstalk with promising anti-nitrosative, antioxidant, and anti-inflam matory properties in an endotoxin induced ARDS model. In prostate cancer, Nimbolide h as been shown to reduce the size of prostate tumor by up to 70 per cent and suppress it s spread or metastasis by half. This is possible because a direct target of nimbolide in p rostate cancer is glutathione reductase, an enzyme which is responsible for maintaining the antioxidant system that regulates the STAT3 gene in the body. The activation of the STAT3 gene has been reported to contribute to prostate tumor growth and metastasis. Nimbolide can substantially inhibit STAT3 activation and thereby abrogating the growth and metastasis of prostate tumor. Nimbolide induces autophagy mediated apoptotic cell death in breast cancer with epigenetic modifications. Nimbolide can suppress the growt h of human colorectal cancer through modulation of the proinflammatory microenvironm ent. Nimbolide abrogates ceruletide-induced chronic pancreatitis by modulating beta-cat enin/Smad in a sirtuin-dependent way. Other useas include oral care, gastric ulcers, hyp eracidity, entry inhibition against (herpes simplex virus type 1) infection, enhances healt h and reduces inflammation in rheumatoid arthritis, lowers blood sugar levels and, has a ntioxidant effects.

* Omega-3 Derived SPMs. SPM are metabolites of arachidonic acid (AA), eicosapentae noic acid (EPA), docosahexaenoic acid (DHA), or n-3 DPA; these metabolites are terme d lipoxins (Lx), resolvins (Rv), protectins (PD) (also termed neuroprotectins [NP]), and m

aresins (MaR). EPA, DHA, and n-3 DPA are n-3 fatty acids; their conversions to SPM ar e proposed to be one mechanism by which n-3 fatty acids may ameliorate inflammatory diseases. SPM act, at least in part, by either activating or inhibiting cells through binding to and thereby activating or inhibiting the activation of specific cellular receptors. The infl ammation-based diseases which may be treated by such metabolically resistant SPM a nalogs include not only pathological and tissue damaging responses to invading pathog ens but also a wide array of pathological conditions in which inflammation is a contributi ng factor such as allergic inflammatory diseases (e.g. asthma, rhinitis), autoimmune dis eases (e.g. rheumatoid arthritis, systemic lupus erythematosus), psoriasis, atherosclero sis disease leading to heart attacks and strokes, type 1 and type 2 diabetes, the metabo lic syndrome, and certain dementia syndromes (e.g. Alzheimer's disease, Huntington's d isease). Excessive inflammatory responses to insult as well as many pathological inflam matory responses that contribute to these diseases may reflect, in part, a failure in this c lass switching. Diseases caused or worsened by non-adaptive inflammatory responses may be amenable to treatment with SPM. SPMs also stimulate anti-inflammatory and tis sue reparative types of responses in epithelium cells, endothelium cells, fibroblasts, sm ooth muscle cells, osteoclasts, osteoblasts, goblet cells, and kidney podocytes as well a s activate the heme oxygenase system of cells thereby increasing the production of the tissue-protective gaso-transmitter, carbon monoxide in inflamed tissues.

* Pinabulin is a novel small molecule that is being developed for the mitigation of chemo therapy-induced neutropenia. Administered by IV infusion on the same day of (approxim ately 1 h after) chemotherapy, plinabulin will be given in a single dose of 20 mg/m2 per cycle. Plinabulin has the potential to be an effective, safe (with much less bone pain), co st-effective, and convenient alternative to G-CSF for the prevention of chemotherapy-in duced neutropenia.

* Rifampicin is an antibiotic used to treat several types of bacterial infections, including t uberculosis, Mycobacterium avium complex, leprosy, and Legionnaires’ disease. Comm on side effects include nausea, vomiting, diarrhea, and loss of appetite. It often turns uri ne, sweat, and tears a red or orange color. Liver problems or allergic reactions may occ ur. It is part of the recommended treatment of active tuberculosis during pregnancy, thou gh its safety in pregnancy is not known. Rifampicin is of the rifamycin group of antibiotic s. It works by decreasing the production of RNA by bacteria. Rifampicin can be used alo ne in patients with latent tuberculosis infections to prevent or prolong the development o f active disease because only small numbers of bacteria are present. Rifampicin is also used to treat nontuberculous mycobacterial infections including leprosy (Hansen's disea se) and Mycobacterium kansasii. It is also used in the treatment of Mycobacterium ulcer ans infections as associated with Buruli ulcer. Rifampicin is used to treat itchiness cause d by primary biliary cholangitis.

* SH-11037, a synthetic derivative of the antiangiogenic homoisoflavonoid cremastranon e, in models of ocular neovascularisation. SH-11037 dose-dependently suppressed angi ogenesis in the choroidal sprouting assay ex vivo and inhibited ocular developmental an giogenesis in zebrafish larvae. Additionally, intravitreal SH-11037 significantly reduced c horoidal neovascularisation (CNV) lesion volume in the laser-induced CNV mouse mod

el, comparable to an anti-VEGF antibody. Moreover, SH-11037 synergised with anti-VE GF treatments in vitro and in vivo. SH-11037 was not associated with signs of ocular tox icity and did not interfere with retinal function or pre-existing retinal vasculature. SH-110 37 is thus a safe and effective treatment for murine ocular neovascularisation, worthy of further mechanistic and pharmacokinetic evaluation. Ocular neovascularisation underlie s blinding eye diseases such as retinopathy of prematurity, proliferative diabetic retinopa thy, and wet age-related macular degeneration. These diseases cause irreversible visio n loss.

* Sertraline is an antidepressant of the selective serotonin reuptake inhibitor (SSRI) clas s. It is used to treat major depressive disorder, obsessive–compulsive disorder, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder, and social anxiety disorder. Sertraline is used for a number of conditions, including major depressive disorder (MDD), obsessive–compulsive disorder (OCD), body dysmorphic disorder (BDD), posttraumatic stress disorder (PTSD), premenstrual dysphoric disorder (PMDD), panic disorder, and social anxiety disorder (SAD). It has also been used for premature ejaculation and vascular headaches but evidence of the effectiveness in treating those conditions is not robust. Sertraline is not approved for use in children except for those with OCD.

* Sleeping Aid is Melatonin, Glycine and Theanine. Melatonin is a metabolic hormone made in the pineal gland, retina, and intestines. Melatonin is released into the blood stream by the pineal gland (which resides in the brain) to set the body’s biological clock and initiate sleep. Darkness stimulates the pineal gland and causes it to produce more melatonin. Day light stops the body’s production of melatonin. Melatonin helps to promote healthy sleep patterns. Melatonin also protects cells from free radical damage, and directs the release of growth and sex hormones. Glycine stimulates the production of the serotonin, the "feel good" hormone that helps elevate mood, improve sleep quality, and enhance cognition and memory. Theanine is believed to be the primary component of green tea that provides a relaxing effect. Theanine is an amino acid derivative of glutamine. Theanine promotes alpha brain wave production, alpha waves are associated with a calm mental state, thus, theanine helps to induce a state of calm relaxation.

* Sodium Butyrate is essential for maintaining a healthy environment in the gut. Butyrate nourishes the colon wall, maintains a healthy lining and barrier function of the colon, and prevents intestinal inflammation. Butyrate suppresses the activity of cells and proteins that drive inflammation. HDAC inhibitors improve the tumor-targeting abilities of immune cells like T cells and natural killer cells; they are currently under investigation as potential cancer drugs. This class of compounds also reduces many inflammatory signals and increases Tregs, a type of white blood cell that prevents allergies and autoimmunity. Butyrate may improve learning and long-term memory. Butyrate may impact social life. Along with other fatty acids produced by gut bacteria, butyrate is a “social odor.” According to one study, it may even influence whether people will find you attractive.

* Sodium Phenylbutyrate is used to treat urea cycle disorders in people who lack certain liver enzymes needed to properly eliminate waste substances from the body. This medicine helps prevent a build-up of ammonia in the blood. Sodium Phenylbutyrate is the sodium salt of phenylbutyrate, a derivative of the short-chain fatty acid butyrate, with potential antineoplastic activity. Phenylbutyrate reversibly inhibits class I and II histone deacetylases (HDACs), which may result in a global increase in gene expression, decreased cellular proliferation, increased cell differentiation, and the induction of apoptosis in susceptible tumor cell populations. In cystic fibrosis, a point mutation in the Cystic Fibrosis Transmembrane Conductance Regulator protein, causes it to be unstable and misfold, hence trapped in the endoplasmic reticulum and unable to reach the cell membrane. This lack of CFTR in the cell membrane leads to disrupted chloride transport and the symptoms of cystic fibrosis. Sodium phenylbutyrate can act as a chemical chaperone, stabilising the mutant CFTR in the endoplasmic reticulum and allowing it to reach the cell surface. Deriving from its activity as a histone deacetylase inhibitor, sodium phenylbutyrate is under investigation for use as a potential differentiation-inducing agent in malignant glioma and acute myeloid leukaemia, and also for the treatment of some sickle-cell disorders. Sodium phenylbutyrate is also being studied as a therapeutic option for the treatment of Huntington's disease. Phenylbutyrate has been associated with longer lifespans in Drosophila. Phenylbutyrate stops the progression of Parkinson's disease in mice by turning on a gene called DJ-1 that can protect dopaminergic neurons in the midbrain from dying, hence it may help in the treatment of Parkinson's disease in humans.

* TUDCA (Tauroursodeoxycholic acid) is a water-soluble bile salt, which is in contrast to regular bile salts possessing both water soluble and fat soluble ends and conferring a detergent effect. This is good for the bile salt's biological purpose (emulsifying fats in the intestines to help with absorption) but when bile acids back up in the liver, a clinical state called cholestasis which occurs when the liver is unhealthy, these bile salts can be damaging to cells by destroying the membranes and signalling for cell death. TUDCA and other water soluble bile salts like UDCA compete with this toxicity and thus indirectly protect cells from death. Additionally, it seems that TUDCA is able to reduce stress to any cell's Endoplasmic Reticulum; an organelle in cells that serves as a highway from the nucleus out into the cytoplasm, and aids in folding proteins. Through reducing ER stress, TUDCA has been implicated in a wide range of beneficial metabolic effects such as reducing insulin resistance and diabetes, and being a neurological protection agent. However, usages of TUDCA beyond the liver are preliminary whereas usage of TUDCA for helping an already harmed liver is quite reliable as TUDCA is used in clinical settings (hospitals) for treating cholestasis. Ongoing research is finding TUDCA has diminishing apoptotic effects, with potential application in heart disease, Huntington's disease, Parkinson's disease, and stroke. Recently, TUDCA has been found to have protective effects in the eye, especially concerning retinal degenerative disorders.

* Urolithin-B helps severe muscle damage through intense workouts. Additionally, it can also protect our muscles against severe stress cause by high-fat diets. Urolithin B enhanced myotubes growth and differentiation by increasing protein synthesis.

Additionally, introduction of Urolithin B into the system induces hypertrophy and reduces the effects of muscle atrophy. When compared to testosterone, Urolithin B when taken at 15 micromolar units (uM) increased androgen receptor activity by 90% while testosterone was only able to accomplish increased receptor activity of 50% at 100uM. Furthermore, only 15uM of Urolithin B increased muscle protein synthesis by 96% when compared to 100uM of insulin, which increased muscle protein synthesis by only 61%. The conclusion is that it takes far less Urolithin B to increase muscle protein synthesis with much higher level of effectiveness. This means that it takes a lot less Urolitin B to increase androgen activity more effectively then the higher amount of testosterone which increases androgen activity less effectively. Urolithin B is designed to help increase muscle synthesis while reducing the muscle damage that comes alongside intense workouts. Urolithin B use is not suited outside of a gym workout context.

* Volixibat is a medication under development as a possible treatment for nonalcoholic steatohepatitis (NASH), the most severe form of non-alcoholic fatty liver disease (NAFLD). No other pharmacotherapy yet exists for NASH, so there is interest in whether volixibat can prove to be both safe and effective. Volixibat is an IBAT inhibitor, meaning that it blocks the function of the IBAT protein. IBAT is most highly expressed in the ileum, where it is found on the brush border membrane of enterocytes. It is responsible for the initial uptake of bile acids, particularly conjugated bile acids, from the intestine as part of their enterohepatic circulation.

1.3.1.38 RT-MB-50

https://archive.org/details/Resonant_Therapy-Molecular_Biology_50

Acacetin-Indole-3-Carbinol; Apilimod-Vacuolin-1; Arg-Gln-Lys-Gly; Astragaloside IV; BA M15; BAY 60–6583; Bardoxolone Methyl; Castor Oil; Devimistat; Ebselen; Emodin; Fisetin; Gossypol Acetate; HB107 Peptide; HPP593; Icatibant-Hymecrome; Lactacystin-MG132; Klotho Enzyme; Meclofenoxate; Mephenoxalone; Metaxalone; MiR-218-5p; Nicotinamide Mononucleotide; Omaveloxolone; PEA; SynuClean-D; TPPU; Triazavirin; VBIT-4; Voxelotor

* Acacetin-Indole3-Carbinol for estrogen inhibition, estrogen modulation and, hormonal balance. Acacetin is an anti-aromatase and estrogenic activity blocker that is derived from the Damiana Plant. This has been shows as the most effective natural substance to block the synthesis of estrogenic activity. Acacetin is used for weight loss, reduction of estrogen synthesis, relief from menopause symptoms, and prevention in tumor growth. Acacetin is an effective weight loss measure as it blocks the estrogen synthesis in the body and forces the body to seek contractile protein from the synthesis of estrogen receptor fat cells. In men when aromatase creates too much estrogen in the body, it can cause problems like low testosterone levels, estrogen dominance, and even the dreadful gynecomastia, meaning breast growth in males. In postmenopausal women, it is used in the treatment and prevention of breast cancer. Acacetin provides

cardioprotection. Inhibiting glutathione reductase may prevent reductive stress that may lead to heart damage. Neuroprotection thanks to the COX- and AChE-inhibiting properties of this compound. Anti-inflammatory effects on the body. Studies show acacetin pre-treatment may prevent sepsis-induced acute lung injury. Antidiabetic. Research suggests that acacetin may help in improving diabetes complications such as Endothelial Dysfunction. This is thanks to its AR- and XO-blocking properties. Antibacterial. One study found that acacetin is the main antibacterial compound present in the leaves of the Combretum vendae plant. Anticancer. A study on mice reported that acacetin may have antitumor potential against prostate cancer. In this matter, acatein works by targeting the Akt and nuclear factor (NF)-kb signaling pathways. Indole-3-Carbinol (I3C) is a naturally occurring phytochemical found in cruciferous vegetables such as broccoli, cabbageand kale. Indole-3-carbinol is converted in the gut to diindolylmethane (DIM). Indole-3-Carbinol can help to maintain healthy hormonal balance for both men and women and therefore may support the health of the breast, prostate, and other reproductive organs. Data from clinical trials show that Indole-3-Carbinol is effective in treatment of precancerous cervical dysplasia and vulvar intraepithelial neoplasia. DIM, a phytonutrient found in cruciferous vegetables, has been shown in animal studies to help maintain normal levels of a potentially damaging estrogen called 4-hydroxyestrone. Human reproductive cancers may be affected by estrogen levels, and Indole-3-Carbinol may prevent these by both reducing estrogen levels and blocking estrogen receptors. Studies indicate that Indole-3-Carbinol has potential value as a chemopreventive agent for breast cancer through its estrogen receptor modulating effect. Indole-3-Carbinol helps to regulate cell growth rates, and helps to change a strong and inflammatory form of estrogen into a safer, less aggressive form. Indole-3-carbinol is also known to support the liver’s detoxification processes as well as normal cellular reproduction. Since the liver is the only organ in the body capable of regeneration, Indole-3-carbinol also encourages healing and repair when a part of the liver endures damage. Reports indicate that Indole-3-carbinol supports the natural elimination of toxins from the liver, increases the body’s natural metabolism of hormones and helps maintain normal hormone levels.

* Apilimod-Vacuolin-1 are two PIKfyve kinase inhibitors which have been found in lab tests to block the SARS-CoV-2 virus from infecting human cells. Besides vaccines, effective COVID-19 therapies that can significantly reduce complications and deaths are also needed to help those people who will continue to get infected. The two drugs are similar and they can both block the Ebola virus, researchers found a few years ago. Recently apilimod has been repurposed as a potential antiviral and anti-cancer drug, with possible applications in the treatment of non-Hodgkin lymphoma as well as viral diseases such as Ebola virus disease, Lassa fever and COVID-19.

* Arg-Gln-Lys-Gly, is Arginine, Glutamine, Lysine, Glycine - An amino acid combination which may help with cognition in people who produce less Klotho protein. Since Klotho declines with age, it's probably a good idea to keep it elevated. Having low Klotho downregulates SIRT1, but increasing SIRT1 seems to make up for some of the vascular benefits of Klotho, so it's probably a good idea to increase SIRT1 as well (see Fisetin). However, decreased Klotho may not be all bad. For example, mice that are unable to

produce normal amounts of Klotho have better abilities at regulating body temperature, better bile acid synthesis, smaller gallbladders, and more brown fat (BAT). They are also protected against non-alcoholic fatty liver diseases and have better insulin sensitivity.

* Astragaloside IV (AS-IV) is an antioxidant derivative from a traditional Chinese herbal medicine Astragalus membraneaceus Bunge and exerts anti-inflammatory and longevity effects and neuroprotective activities. Senescent astrocytes have been implicated in the aging brain and neurodegenerative disorders, including Parkinson's disease (PD). AS-IV protected against the loss of dopamine neurons and behavioral deficits in the mouse model of PD, which companied by reduced accumulation of senescent astrocytes in substantia nigra compacta. Mechanistically, AS-IV promoted mitophagy, which reduced damaged mitochondria accumulation and mitochondrial reactive oxygen species generation and then contributed to the suppression of astrocyte senescence. The inhibition of autophagy abolished the suppressive effects of AS-IV on astrocyte senescence. AS-IV prevents dopaminergic neurodegeneration in PD via inhibition of astrocyte senescence through promoting mitophagy and suggest that AS-IV is a promising therapeutic strategy for the treatment of age-associated neurodegenerative diseases such as PD.

* BAM15 is a small mitochondrial uncoupler that decreases the body fat mass of mice without affecting food intake and muscle mass or increasing body temperature. Additionally, the molecule decreases insulin resistance and has beneficial effects on oxidative stress and inflammation. The findings, published in Nature Communications on May 14, 2020, hold promise for future treatment and prevention of obesity, diabetes, and especially nonalcoholic steatohepatitis (NASH), a type of fatty liver disease that is characterized by inflammation and fat accumulation in the liver. Mitochondrial uncouplers are small molecules that go to the mitochondria to help the cells respire more. Effectively, they change metabolism in the cell so that we burn more calories without doing any exercise. Mitochondrial uncouplers transport protons into the matrix by bypassing ATP synthase, which throws off the proton motive force (PMF.) To reestablish the gradient, protons must be exported out of the mitochondrial matrix. As a result, the cell begins to burn fuel at higher than necessary levels. Knowing that these molecules can change a cell's metabolism, researchers wanted to be sure that the drug was reaching its desired targets and that it was, above all, safe. Through a series of mouse studies, the researchers found that BAM15 is neither toxic, even at high doses, nor does it affect the satiety center in the brain, which tells our body if we are hungry or full.

* BAY 60–6583 is a selective adenosine A2B receptor agonist. It has been shown to provide protection from ischemia (lack of oxygen due to blocked blood supply) in both the heart and kidney of test animals, and has also been shown to be beneficial in treatment of acute lung and brain injury, as well as claimed anti-aging and anti-obesity effects, showing a range of potential applications for selective A2B agonists.

* Bardoxolone methyl (RTA 402) is an investigational oral therapy to treat the symptoms of chronic kidney disease (CKD) that occurs as a result of Alport syndrome. Alport

syndrome is caused by a mutation, or defect, in one of the collagen genes. Collagen is a major structural component of different organs and tissues in the body, including the kidneys. Bardoxolone methyl is a small molecule that reduces oxidative stress and inflammation, which may improve kidney function in Alport syndrome patients. A “Nrf2 activator,” it acts by stimulating the Nrf2 pathway, thereby promoting normal mitochondrial function in the cell. Bardoxolone methyl binds to a protein called KEAP1, preventing it from degrading the Nrf2 protein. The subsequent increased activation of Nrf2 stimulates the production of anti-oxidant proteins that remove the damaging ROS, reducing oxidative stress and damage to proteins that improve mitochondrial energy production. By binding to KEAP1, bardoxolone methyl can also inhibit NF-κB, a pro-infla mmatory protein complex, reducing inflammation in the kidneys.

* Castor Oil has been used and recommended for its powerful medicinal and curative eff ects for centuries by physicians. Castor oil is extracted from the seeds of the castor oil p lant (ricinus communis). Castor oil is a mild and effective laxative. Castor oil has been d ocumented to discharge tape worms successfully. It can give immense relief from arthriti s, back pain and general muscle aches and soreness. It cures sleeplessness and insom nia. Castor oil treats skin infections, relieves stomachaches and colic in babies and allev iates period pain and menstrual cramps. Castor oil shrinks swollen lymph nodes, hemor rhoids and, cures vaginal infections and urinary tract infections. In addition, relieves gall bladder pain, tootaches, aching feet and, boosts the immune system, increases lympho cytes. Castor oil drains and heals pilonidal cysts with little or no scarring. Castor oil softe ns skin naturally by penetrating the surface layers. By penetrating deeply into the skin, it can hydrate cells and prevent wrinkles. Castor oil cures acne and keeps the skin looking smooth, youthful and unlined. beside, breaks up external and internal scar tissue, and p revents new scars from forming. Castor oil soothes shingles, thickens eyelashes and ey ebrows, prevents hair loss and regenerates hair. Castor oil keeps hair looking soft and s hiny, softens thick calluses and removes corns, cures skin infections like athlete’s foot a nd ringworm, prevents stretch marks and, will remove moles, warts and age spots (liver spots).

* Devimistat (CPI-613), a novel lipoate analog inhibiting mitochondrial metabolism, show s the new hope for pancreatic cancer treatment as an efficient and well-tolerated therap eutic option treated alone or in combination with chemotherapy. CPI-613 exhibits antica ncer activity in pancreatic cancer cells by triggering ROS-associated apoptosis, which is accompanied by increased autophagy and repressed lipid metabolism through activatin g the AMPK signaling. Intriguingly, ACC, the key enzyme modulating lipid metabolism, is identified as a vital target of CPI-613, which is inactivated in an AMPK-dependent mann er and influences apoptotic process upon CPI-613. Blockade or enhancement of autoph agic process does not increase or blunt apoptosis to CPI-613, but inhibition of the AMP K-ACC signaling significantly attenuates apoptosis induced by CPI-613, suggesting CP I-613-mediated lipid metabolism reduction contributes to its cytotoxicity in pancreatic ca ncer cells. It is also being studied for the treatment of patients with metastatic pancreatic cancer and relapsed or refractory acute myeloid leukemia (AML).

* Ebselen is a synthetic organoselenium drug molecule with anti-inflammatory, anti-oxid

ant and cytoprotective activity. It acts as a mimic of glutathione peroxidase and can also react with peroxynitrite. It is being investigated as a possible treatment for reperfusion injury, stroke, hearing loss, tinnitus, and bipolar disorder. Additionally, ebselen may be effective against Clostridium difficile infections and has been shown to have antifungal activity Aspergillus fumigatus. Ebselen is a potent scavenger of hydrogen peroxide as well as hydroperoxides including membrane bound phospholipid and cholesterylester hydroperoxides. Preliminary studies demonstrate that Ebselen exhibits promising inhibitory activity against COVID-19 in cell-based assays. The effect was attributed to irreversible inhibition of the main protease via a covalent bond formation with the thiol group of the active center's cysteine (Cys-145).

* Emodin (1,3,8-trihydroxy-6-methyl-anthraquinone) is the main active ingredient of the Chinese medicine rhubarb. It is an effective component in rhubarb to cure intestinal dysfunction, but the specific mechanism remains unknown. Severe acute pancreatitis (SAP) is an acute abdominal disease that has a rapid onset and is dangerous; its mortality rate can be as high as 20%–40%. SAP may be related to the mechanisms of self-digestion of the pancreas, the cascade of inflammatory mediators caused by pancreatic tissue damage, pancreatic blood circulation disorder induced by inflammatory mediators and vasoactive substances, and secondary infection of the pancreas due to intestinal bacterial translocation; however, its pathogenesis has yet to be fully studied. Modern pharmacological research has revealed that emodin has various functions, including antioxidation, free radical scavenging, anti-inflammatory, anti-tumor, and anti-apoptosis. Rhubarb is used to treat SAP, improve intestinal mucosal dysfunction caused by SAP, and significantly reduce the mortality of patients with SAP. MiR-218-5p upregulation by emodin treatment might be involved in the alleviation of intestinal damage with acute necrotizing pancreatitis.
(https://doi.org/10.1177/2058738420941765)

* Fisetin is a naturally occurring plant polyphenol, with unique longevity and anti-aging properties. It is a type of polyphenol that is a flavonoid. Flavonoids possess antioxidant properties which help keep the body from accumulating harmful waste. Like another popular flavonol compound, resveratrol, Fisetin activates sirtuin, a type of protein responsible for regulating cellular health and aging. Fisetin, as an antioxidant, scavenges harmful free radicals, while increasing the master antioxidant glutathione, as well as the important antioxidants catalase and superoxide dismutase. Fisetin protects the liver because of its antioxidant capabilities in diabetic rats. isetin blocks NF-κB (NF-kB), a protein complex which is involved in the inflammation process. Although some inflammation pathways are beneficial and necessary, in diseases with excessive inflammation or cancers, blocking NF-kB is beneficial. Fisetin can be beneficial for diabetics because it increases insulin levels (thereby reducing reliance on exogenous insulin), activates more storage of glucose in the liver in the form of glycogen, and makes the production of energy from glucose more effective. Fisetin reduces enzymes which cancers rely on to proliferate to other tissues by reducing MMP enzymes. Fisetin beneficially modulates pathways that influence cancer growth and progression by inhibiting Akt/mTOR signaling. Fisetin activates the process of clearing damaged cells from the body through the process of autophagy, which is activated by blocking the mTOR signaling. Fisetin increased th

e lifespan of mice by 10%, the lifespan of yeast by 50% and, the lifespan of fruit flies by >20%.

* Gossypol Acetate is a polyphenolic aldehyde that permeates cells and acts as an inhib itor for several dehydrogenase enzymes such as lactate dehydrogenase, NAD-linked en zymes. Gossypol, a known antispermatogenic agent from the cotton plant genus Gossy pium, was found to inhibit yellow perch sperm motility in vitro and lactate dehydrogenas e activity in spermatozoa when used in a dose-dependent manner. Gossypol has been approved to have antiproliferative and apoptosis-inducing effects on some kinds of canc er cell lines in vitro. Gossypol acetate is able to inhibit tumor growth in Wus1-bearing mi ce, but the survival of mice is not prolonged, and tumor grows rapidly after short inhibitio n. Gossypol has now been found to have inhibitory effects on proliferation or to induce a poptosis in ovarian cancer, endometrial cancer, adrenal cortical tumor, thyroid cancer, c olon carcinoma, leukemia, pancreatic cancer, melanoma, lymphoma, lung cancer and, l ung adenocarcinoma, especially the most malignant proximal-proliferative subtype witho ut druggable protein kinase mutations. In addition, gossypol can increase the sensitivity of drug-resistant tumor cells to chemotherapy and radiotherapy. Some clinical trials sho wed gossypol is well-tolerated, and partial responses are observed in some patients. (https://doi.org/10.1021/jacs.9b08777)

* HB107 Peptide is a derivative of Cecropin B, that has demonstrated efficacy in enhanc ing wound healing in both burn and incision animal models. HB107 has been evaluated for efficacy in a mouse incision model and for safety and efficacy in a pig burn wound m odel. The peptide was well tolerated in terms of safety both topically and in an IV acute t oxicity mouse model with no adverse effects observed. HB107 not only demonstrated ef ficacy and safety, but due to being a relatively short synthetic peptide, costs significantly less to manufacture than the current approved therapies. Peptides of the innate immune system play a vital role in the protection and repair of almost all biological systems. Suc h peptides have been implicated in a range of activities associated with prevention of di sease and modulation of innate immunity.

* HPP593 aims to recharge tired cells, giving mitochondrial disease patients new hope o f a disease-specific treatment. Mitochondria are little power factories inside almost every cell in the body; they provide each cell with the energy it needs to function. Mitochondria are unique because they contain their own genome, completely separate from the entire nuclear genome you usually think about. Mutations in mitochondrial genes can disrupt t he ATP creation pathway, stunting mitochondria’s ability to create energy. Dysfunctional mitochondria leave cells fatigued. Primary mitochondrial myopathies (PMMs) are a grou p of rare, often life-threatening, mitochondrial diseases where genetic mutations in the mitochondria cause muscle dysfunction and weakness, among other problems. There a re at least 50 different syndromes under the category of PMMs, a lot of syndromes overl ap, and, thanks to mitochondrial sequencing, we now know they are caused by the sam e genetic lesion.

* Icatibant-Hymecrome. Icatibant is a medication for the symptomatic treatment of acute attacks of hereditary angioedema (HAE) in adults with C1-esterase-inhibitor deficiency. I

t is not effective in angioedema caused by medication from the ACE inhibitor class. It is a peptidomimetic consisting of ten amino acids, which is a selective and specific antago nist of bradykinin B2 receptors. Bradykinin is a peptide-based hormone that is formed lo cally in tissue is, very often in response to a trauma. It increases vessel permeability, dil ates blood vessels and causes smooth muscle cells to contract. Bradykinin plays an imp ortant role as the mediator of pain. Surplus bradykinin is responsible for the typical sym ptoms of inflammation, such as swelling, redness, overheating and pain. These sympto ms are mediated by activation of bradykinin B2 receptors. Icatibant acts as a bradykinin inhibitor by blocking the binding of native bradykinin to the bradykinin B2 receptor. Little is known about the effects of icatibant on the bradykinin B1 receptor. A common theme t hat underpins many of the disease manifestations of COVID-19, such as acute respirato ry distress syndrome (ARDS), is inflammation and edema, or fluid build-up. An assorted cast of leaky blood vessels, immune cells (as well as the cytokines and other molecules produced by them), and plasma proteins such as clotting factors, bradykinin, and other kinins assume center stage in this spectacle of acute inflammation. Hymecromone (4-m ethylumbelliferone) is a drug used in bile therapy. It is used as choleretic and antispasm odic drugs and as a standard for the fluorometric determination of enzyme activity. Hym ecrome is also a selective hyaluronic acid inhibitor. It has been demonstrated that the in creased levels of pro-inflammatory cytokines in the lungs of COVID-19 patients, can res ult in the production of hyaluronan or hyaluronic acid (HA) by inducing the expression of HA-synthase-2 (HAS2) this may contribute to ARDS and death. So, lowering HA levels t hrough administration of 4-methylumbelliferone (4-MU), and blocking the inflammatory c ytokines could be effective for treating dyspnea and reducing the mortality rate of COVI D-19 patients.

* Klotho Enzyme is encoded by the KL Factor a type-I membrane protein that is related t o Beta-glucuronidases. Reduced production of this protein has been observed in patient s with chronic kidney failure (CKF), and this may be one of the factors underlying the de generative processes (e.g., arteriosclerosis, osteoporosis, and skin atrophy) seen in CK F. Also, mutations within this protein have been associated with ageing, bone loss and a lcohol consumption. Transgenic mice that overexpress Klotho live longer than wild-type mice. Klotho is an anti-aging protein that acts as a hormone and is secreted into the blo od from the kidneys. Its presence decreases with age causing the vascular and arterial system to stiffen. A recent study had shown the inverse relationship between the Klotho concentration and Blood Pressure (BP) salt sensitivity. Aging, a universal phenomenon causes not only hypertension but dementia and frailty, and impairs the healthy life expec tancy of individuals. The aging-related phenomenon of Klotho protein deficiency may be related to the onset of dementia and sarcopenia, or the loss of muscle-mass and usage associated with aging. Its onset mechanism is currently under investigation. Klotho prot ein is involved in many biological pathways in both humans and animals and appears to have major effects throughout our lifespan. Klotho influences longevity, cognition, and ki dney function and slows the progression of diabetes and cancer. Klotho deficient animal s exhibit a premature aging phenotype characterized by a short lifespan, vascular and ki dney disease, reduced body weight, osteoporosis, age-related skin changes, ectopic cal cification, hypoglycemia, infertility, and cognitive and memory impairment. In humans, th e Klotho gene (KL) exists in three different forms that are associated with different lifesp

ans, intelligence, and health status. About 75% of the population has the standard KL fo rm. A much smaller group has one copy of the genetic variant KL-VS, which increases K lotho levels. This is associated with a longer lifespan, good heart and kidney function, la rger brain size, and better cognition in healthy adults. A very small group of people have two copies of KL-VS, resulting in lower Klotho levels and an increase risk of disease.

* Lactacystin-MG132 are two ubiquitin-proteasome system (UPS) inhibitors. The “ubiqui tin-proteasome system” (UPS), was used in a study to restore memory loss in animal m odels with Alzheimer’s disease. According to the researchers, as a result of metabolism and other biological processes, neurons constantly produce biological garbage and nee d a stable garbage removal system. If not removed from neurons, this garbage piles up, becoming toxic and causing brain malfunction. The new study, published in the FASEB j ournal, argues that blocking the degradation of plasticity (memory) proteins by UPS inhi bitors may reverse memory loss in Alzheimer’s. The result offers hope that proteasome i nhibitor treatments may have potential therapeutic value against memory disorders like Alzheimer’s. The analogues of used UPS inhibitor drugs are approved to treat cancer, a nd have no established side effects in the used concentration.

* Meclofenoxate, also known as centrophenoxine is a cholinergic nootropic used as a di etary supplement. It is an ester of dimethylethanolamine (DMAE) and 4-chlorophenoxya cetic acid (pCPA). In elderly patients, meclofenoxate has been shown to improve perfor mance on certain memory tests. Meclofenoxate also increases cellular membrane phos pholipids. Meclofenoxate is considered to be very safe and high in tolerability. However, possible side effects may include, rarely, insomnia, dizziness, restlessness, muscle trem or, depression, nausea, muscle tension, and headache; these side effects may be due t o overdosage and may indicate the need for the dosage to be reduced. Meclofenoxate has been found to increase the lifespans of mice by 30–50%.

* Mephenoxalone is a muscle relaxant and mild anxiolytic. It inhibits neuron transmission, relaxing skeletal muscles by inhibiting the reflex arc. As the effect of muscle relaxation, mephenoxalone affects mental condition, and is also a treatment for nervousness and anxiety.

* Metaxalone is a muscle relaxant used to relax muscles and relieve pain caused by strains, sprains, and other musculoskeletal conditions. Its exact mechanism of action is not known, but it may be due to general central nervous system depression. It is considered to be a moderately strong muscle relaxant, with relatively low incidence of side effects. Possible side effects include nausea, vomiting, drowsiness and CNS side effects, such as dizziness, headache, and irritability. The metabolism of metaxalone involves enzymes CYP1A2 and CYP2C19 in the cytochrome P450 system. Because many medications are metabolized by enzymes in this system, precaution must be taken when administering it with other medications involving the P450 system to avoid interactions. Because of potential for side effects, this drug is considered high risk in the elderly.

* MiR-218-5p. This miRNA is a tumor suppressor which plays an important role in

regulating the pathway involved in follicle regeneration, and could be a candidate for future drug development. Hair growth depends on the health of dermal papillae (DP) cells, which regulate the hair follicle growth cycle. Current treatments for hair loss can be costly and ineffective, ranging from invasive surgery to chemical treatments that don't produce the desired result. Recent hair loss research indicates that hair follicles don't disappear where balding occurs, they just shrink. If DP cells could be replenished at those sites, the thinking goes, then the follicles might recover. MiRNA miR-218-5p enhances the molecular pathway responsible for promoting hair follicle growth. Researchers found that increasing miR-218-5p promoted hair follicle growth, while inhibiting it caused the follicles to lose function.

* Nicotinamide Mononucleotide (NMN), the metabolic precursor of NAD+, rejuvenates oocyte quality in aged animals, leading to restoration in fertility, and this can be recapitulated by transgenic overexpression of the NAD+-dependent deacylase SIRT2, though deletion of this enzyme does not impair oocyte quality. These benefits of NMN extend to the developing embryo, where supplementation reverses the adverse effect of maternal age on developmental milestones. These findings suggest that late-life restoration of NAD+ levels represents an opportunity to rescue female reproductive function in mammals. Declining oocyte quality is considered an irreversible feature of aging and is rate limiting for human fertility. Bertoldo et al. show that reversing an age-dependent decline in NAD(P)H restores oocyte quality, embryo development, and functional fertility in aged mice. These findings may be relevant to reproductive medicine.

* Omaveloxolone (RTA 408) is a second generation member of the synthetic oleanane triterpenoid compounds and currently in clinical development. Preclinical studies have demonstrated that omaveloxolone possesses antioxidative and anti-inflammatory activities and the ability to improve mitochondrial bioenergetics. Omaveloxolone is currently under clinical investigation for a variety of indications, including Friedreich’s ataxia, mitochondrial myopathies, immunooncology, and prevention of corneal endothelial cell loss following cataract surgery. The effects of omaveloxolone and related synthetic triterpenoid compounds have been documented in over 200 peer-reviewed scientific manuscripts. The mechanism of action of omaveloxolone and its related compounds has been demonstrated to be through a combination of activation of the antioxidative transcription factor Nrf2 and inhibition of the pro-inflammatory transcription factor NF-κB. Nrf2 transcriptionally regulates multiple genes that play both direct and indirect roles in producing antioxidative potential and the production of cellula r energy (i.e., adenosine triphosphate or ATP) within the mitochondria. Consequently, un like exogenously administered antioxidants (e.g., vitamin E or Coenzyme Q10), which pr ovide a specific and finite antioxidative potential, omaveloxolone, through Nrf2, broadly activates intracellular and mitochondrial antioxidative pathways, in addition to pathways that may directly increase mitochondrial biogenesis (such as PGC1α) and bioenergetics.

* PEA (palmitoylethanolamide) is a fatty acid amide molecule which has been shown to have anti-inflammatory properties, especially relating to neuropathic pain, and modulate

immune system responses. It can be found in plant, human, and animal tissues. When t he body experiences pain or inflammation, levels of endogenous PEA increase. PEA wo rks directly to reduce inflammation by inhibiting inflammatory cytokines. Cytokines are p roteins that function as intracellular messengers. Specifically, PEA inhibits the secretion of a cytokine called tumor necrosis factor alpha (TNF alpha). Perhaps the biggest effect on inflammation which PEA exerts is over interleukins, a type of cytokine that is a protei n which helps cells communicate. Like TNF alpha, interleukins are secreted during the i nflammation process, and they are part of the immunological system. PEA indirectly acti vates the endocannabinoid system within the body. The ECS (endocannabinoid system) contains fat based neurotransmitters and proteins that bind with cannabinoid receptors i n the brain and peripheral nervous system. The current understanding of the ECS is tha t it is involved in processes such as pain-sensation, immune system activity, fertility, pre/ post-natal development, mood, and memory. PEA seemed to bolster the effect of pharm aceutical analgesics, such as oxycodone, in patients with sciatic and back pain, vertebr al stenosis, and hernia when previous treatment with analgesics alone did not offer pain relief. PEA also reduced arthritis, back pain after surgery (failed back surgery syndrome), fibromyalgia and, endometriosis. Beside immunotherapeutic benefits, PEA improves br ain recovery after injury or disease and, offers mood, immune, and eye support without adverse side effects.

* SynuClean-D molecule interrupts the formation of the alpha-synuclein amyloid fibres r esponsible for the onset of Parkinson's disease, and reverts the neurodegeneration cau sed by the disease. SynuClean-D inhibits aggregation of alpha-synuclein by binding to t he inner cavity of alpha-synuclein fibrils. Alpha-synuclein is a major component of amylo id deposition in dopaminergic neurons of Parkinson’s patients. SynuCleanD has therape utic potential in Parkinson’s disease as it can prevent the degeneration of dopaminergic neurons.

* TPPU, short for 1-trifluoromethoxyphenyl-3-(1-propionylpiperidin-4-yl) urea function of interest is inhibition of soluble epoxide hydrolase (sEH), an enzyme that plays a key role in activating inflammatory processes and can lead to chronic inflammation. Tested in mi ce with genetically induced arthritis, it suppressed the inflammatory process, reducing b oth inflammation and joint tissue wear and tear. Arthritic mice treated with the substance displayed less pain and swelling and had lower clinical scores measuring the extent of t he inflammation than untreated arthritic rats. The treatment also reduced the degree of pain associated with inflammation. This was because control of the inflammatory proces s led to a decrease in the migration of white blood cells to the affected region, not just at tenuating the disease but reducing cartilage erosion. In addition, the treated group show ed an increase in the number of regulatory T-cells, lymphocytes that produce anti-inflam matory cytokines, and a decrease in the number of Th17 defense cells, which are highly inflammatory. TPPU was designed to be well tolerated and easily absorbed when admin istered orally. It boosts the body's natural defenses and increases the number of metabo lites our organism produces.
(doi.org/10.1096/fj.202000415R)

* Triazavirin (TZV, Riamilovir) is a broad-spectrum antiviral drug developed in Russia thr

ough a joint effort of Ural Federal University, Russian Academy of Sciences, Ural Center for Biopharma Technologies and Medsintez Pharmaceutical. It has a novel triazolotriazine core, which represents a new structural class of non-nucleoside antiviral drugs. It was originally developed as a potential treatment for pandemic influenza strains such as H5N1, and most of the testing that has been done has focused on its anti-influenza activity. However triazavirin has also been found to have antiviral activity against a number of other viruses including Tick-borne encephalitis virus, and Forest-Spring Encephalitis virus, and is also being investigated for potential application against Lassa fever and Ebola virus disease. In February 2020, testing of triazavirin was started against SARS-CoV-2. As of 11th of September 2020, provisional results in China suggest that Triazavirin reduces the duration of the disease and alleviates many of the symptoms of COVID-19.

* VBIT-4 is a small molecule that inhibits cell death and restores mitochondrial functions associated with several diseases. This novel molecule prevents the formation of the large pore caused by VDAC1 overexpression and thereby prevents the exit of these factors from the mitochondria. Without the release of these factors, cell death in diseases such as Alzheimer's and Parkinson's diseases or mtDNA release like in Systemic Lupus Erythematosus is avoided. Inhibition of VDAC1 by the small molecule VBT-4 resulted in substantial improvement in pathological aspects of the disease. The results thus far with lupus have been so promising, we believe that the molecule will be beneficial with regards to other diseases such as Alzheimer's, Crohn's and ulcerative colitis – as preliminary results already support. Mitiochrondrial DNA has also been found in the plasma of patients of other autoimmune diseases such as Colitis and Crohn's diseases.

* Voxelotor is a medication used for the treatment of sickle cell disease. Voxelotor is the first hemoglobin oxygen-affinity modulator. Voxelotor has been shown to have disease-modifying potential by increasing hemoglobin levels and decreasing hemolysis indicators in sickle cell patients. It has a safe profile in sickle cell patients and healthy volunteers, without any dose-limiting toxicity. Common side effects for people taking voxelotor were headache, diarrhea, abdominal pain, nausea, fatigue, rash and pyrexia (fever).

1.3.1.39 RT-MB-51

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1-NM-PP1, Andrographolide, ASIC Inhibitors Mix, Avasopasem manganese, Bixalomer, CBR-096-4, Emricasan, Fluvatinib, GLS1 Inhibitor, Golexanolone, Hepatic Encephalopathy Mix, Herpes Zoster, Herpes Zoster Mix, ISRIB, L-Ornithine phenylacetate, MEAI, Methylcobalamin-Adenosylcobalamin, Naftopidil, Neuropathic Pain Mix, Neuropathic Pain Sleep Mix, Neuropathic Pain Mix2, Neuropathic Pain Sleep Mix2, Nitroglycerin, Omecamtiv Mecarbil, Primaxin IV, Shingrix Herpes Zoster Vaccine 1&2, Varespladib sodium, ZFYVE27 Factor, Zostavax Herpes Zoster Vaccine

* 1-NM-PP1 is a cell permeable inhibitor of kinases that have been mutated, by a single base substitution, to become ‘analog sensitive’ (as), as compared to the wild-type kinase. 1-NM-PP1 was first developed to optimally inhibit Src family kinases. One of the main therapeutic approaches to alleviate dysregulated inflammation has been to target the activity of kinases that regulate production of inflammatory mediators. Inflammation is a physiological response of the immune system to injury and infection. This process signals the immune system to heal and repair damaged tissue, as well as to defend itself against infective agents, such as viruses and bacteria.

* Andrographolide is a labdane diterpenoid that has been isolated from the stem and leaves of Andrographis paniculata. Known as the King of Bitters, fah talai jone has been in the spotlight following the surge in Covid-19 infection cases across Thailand. High in andrographolide that can kill some viruses, the Thai herb has been used to cure sicknesses like the flu, sore throat and infection in Asian countries such as China, India and Thailand for centuries. A research team at the Institute of Biological Products of the Department of Medical Sciences under the Ministry of Public Health found that the medicinal herb can kill and inhibit the coronavirus disease, or Covid-19, in test-tube experiments and human trials. All sickness conditions including sore throat, cough, loss of smell and taste, runny nose, headache and fever gradually cured within three to five days. None of the patients developed severe illness such as a high breathing rate or lung infection. Fah talai jone cannot be used for prevention of Covid-19. If you cough, have a fever, sore throat or runny nose, take a normal prescription which is 60mg of andrographolide a day, that is -1/3 of the dose in trials. For those who are anxious and worry if they get the infection during the present outbreak, the advice is taking fah talai jone only when they have fever-like symptoms. The condition should improve within one or two days. If you do not feel better within three days, you should stop using fah talai jone. You should see a doctor. Fah talai jone is a cooling herb. It should not be consumed for more than five to seven days otherwise it may cause numbness in the hands and feet, lowering blood pressure and also impact the kidneys. Not everyone can take fah talai jone. Those who should avoid the medicine are pregnant women, breastfeeding mothers, those who have kidney and liver problems and people who regularly take high blood pressure pills and blood thinners.

* ASIC Inhibitors Mix. Acid-sensing ion channels (ASICs) are a family of proton-sensing channels that are voltage insensitive and cation selective. Psalmotoxin (PcTx1) is a spider toxin from the venom of the Trinidad tarantula Psalmopoeus cambridgei. It selectively blocks Acid Sensing Ion Channel 1-a (ASIC1a), which is a proton-gated sodium channel. Recently, it has been shown that activation of ASIC1a during the acidosis accompanying brain ischemia leads to significant Ca2+ influx, which contributes to neuronal cell death. Inhibition of ASIC1a by psalmotoxin significantly decreased ischemic neuronal cell death. Therefore, it is suggested that desensitized ASIC1's by pharmological intervention could be beneficial for patients at risk of having a stroke. For the same reasons psalmotoxin could contribute in the search for a cure for gliomas. Inhibition of ASIC1a in the amygdala by psalmotoxin could have an anxiolytic effect. As ASIC's play a role in nociception, psalmotoxin could be helpful in designing new analgesic drugs acting directly against pain at the nociceptor level. Mambalgins are peptides found in the venom of the black m

amba (Dendroaspis polylepis polylepis), an elapid snake. First reported by French resea rchers in 2012, mambalgins are unusual members of the 3FTx family in that they have t he in vivo effect of causing analgesia without apparent toxicity. Their mechanism of actio n is potent inhibition of acid-sensing ion channels. Mambalgins have been shown to inte ract specifically with ASIC subtypes present in the central nervous system (homomeric ASIC1a and heteromeric ASIC1a/ASIC2a or ASIC1a/ASIC2b), as well as those found in sensory neurons (ASIC1b and ASIC1a/ASIC1b). They have no effect on other ASICs or on other types of ion channel proteins. Late studies claim that selective ASIC inhibition c ould 'repair' the hearts of heart attack victims, optic nerve degeneration and retinal gang lion cells. The recording plays the sound frequencies of Mambalgins (1, 2 and 3) and Ps almotoxin 1 PcTx1.

* Avasopasem manganese, also known as GC4419, is a highly-selective small molecule mimetic of superoxide dismutase (SOD) being investigated for the reduction of radiatio n-induced severe oral mucositis. This drug has potential application for radiation-induce d esophagitis and oral mucositis, in addition to being currently tested against COVID-19. Avasopasem manganese is a superoxide dismutase mimetic that rapidly and selectively converts superoxide to hydrogen peroxide and oxygen in order to protect normal tissue f rom radiation therapy-induced damage. This drug is currently being investigated against oral mucositis, esophagitis, and COVID-19. Superoxide dismutase mimetic compounds have generated intense interest and have been the focus of considerable efforts to deve lop them as a therapeutic agent for the treatment of a wide range of diseases and disor ders, including reperfusion injury, ischemic myocardium post-ischemic neuropathies, infl ammation, organ transplantation and radiation induced injury.

* Bixalomer is a metal-free, nonabsorbable drug approved in Japan to treat hyperphosp hatemia in dialysis patients. Hyperphosphatemia occurs in patients whose renal function is decreased, since phosphorus is not sufficiently excreted into urine via the kidneys an d consequently accumulates in the body. Bixalomer is amine-functional polymers which decrease the serum phosphorus concentration by binding to phosphate in the gastrointe stinal tract, thus inhibiting absorption of phosphate into the human body. Bixalomer (BX L) was developed to improve gastrointestinal symptoms and reduce constipation, relativ e to sevelamer hydrochloride, in hemodialysis patients. A switch from sevelamer hydroc hloride to BXL improved symptoms of reflux, epigastric fullness, constipation, and metab olic acidosis in hemodialysis patients.

* CBR-096-4 is a molecule devoid of antifungal and human cytochrome P450 inhibitory activity with excellent pharmacokinetics, safety, and efficacy in rodent models of lung, liv er, and skin fibrosis. Fibrosis, a disease in which excessive amounts of connective tissu e accumulate in response to physical damage and/or inflammatory insult, affects nearly every tissue in the body and can progress to a state of organ malfunction and death. A h allmark of fibrotic disease is the excessive accumulation of extracellular matrix-secreting activated myofibroblasts (MFBs) in place of functional parenchymal cells.

* Emricasan acts as a pan-caspase inhibitor and has antiapoptotic and antiinflammatory effects. It was developed for the treatment of liver disease. Emricasan decreases liver in

jury but not metabolic derangement in NASH. It also ameliorates inflammation. In the m urine NASH model, stellate cell activation and hepatic fibrogenesis are attenuated by ad ministration of the pan-caspase inhibitor Emricasan. Emricasan facilitates marginal mas s islet engraftment in a porcine islet autotransplant model. Emricasan may lower aminot ransferase activity in patients with chronic hepatitis C. Emricasan is retained in the liver for prolonged periods with low systemic exposure, exerting a hepatoprotective effect ag ainst alpha-fas-induced liver injury in a mouse model. Emricasan significantly reduced s erum AST and ALT levels in patients with chronic HCV, and was well tolerated over 12 w eeks. Emricasan yielded positive results in Covid-19 trial. The drug offered resolution of all symptoms linked to mild Covid-19 and retained it until day 45. Subjects in the emrica san arm experienced a total mild-Covid-19 symptom resolution, including cough, heada che, and fatigue by day seven, which continued to day 45.

* Fluvatinib is an active compound or medicinal salt with multi-target effects on VEGFR1 ~3, fibroblast growth factor receptor 1~3, RET, Kit and PDGFR. The compound has stro ng activity and provides a potential new treatment option for patients with tumors such a s those in liver and kidney.

* GLS1 Inhibitor. Senescent cells rely on glutaminolysis, and its inhibition offers a promi sing strategy for inducing senolysis in vivo. Senescent cells are associated with a variet y of age-related medical conditions and thus have been proposed as potential targets fo r therapy. Inhibition of the enzyme glutaminase 1 induces the death of senescent cells. Glutaminase targeting also ameliorates aging-related organ dysfunction and obesity-rel ated disorders in mouse models. Ammonia detoxification in hepatic encephalopathy is r egulated by two enzymes: glutaminase or glutamine synthetase. The first produces am monia and the second detoxifies the ammonia, which is why treatments are aimed at gl utaminase inhibition or glutamine synthetase activation. At present, we know that both e nzymes are found not only in the liver, but also in the muscle, intestine, kidney, and brai n.

* Golexanolone is a novel small molecule GABA-A receptor-modulating steroid antagoni st under development for the treatment of cognitive and vigilance disorders caused by al losteric over-activation of GABA-A receptors by neurosteroids. It restored spatial learnin g and motor coordination in animal models of hepatic encephalopathy (HE) and mitigate d the effects of intravenous allopregnanolone in healthy adults in a dose-dependent fas hion. Many patients with cirrhosis experience subtle but disabling cognitive problems, in cluding sleepiness (hypersomnia) and poor attention span, that impair their ability to be gainfully employed or carry out activities of daily living. While there is no approved treat ment yet, it might be improved by an experimental drug, golexanolone, designed to nor malize the function of receptors which inhibit brain function. Golexanolone is well tolerat ed and may improve cognition, as reflected by measures of sleepiness, attention span a nd brain wave activity. Hepatic encephalopathy (HE) is defined as brain dysfunction due to acute and chronic liver disease. Its pathophysiology is multi-factorial and, while loweri ng of plasma ammonia levels reduces the risk and frequency of overt HE events, recent studies suggest that the effects on the brain of hyperammonaemia and other injurious in sults such as neuroinflammation are mediated by neurosteroid-induced allosteric activat

ion of inhibitory GABA-A receptors.

* Hepatic Encephalopathy Mix. The combination of L-ornithine and L-aspartate (LOLA) l owers the level of ammonia in a person's blood. Very weak evidence from clinical trials i ndicates that LOLA treatment may benefit people with hepatic encephalopathy. LOLA lo wers ammonia levels by increasing the generation of urea through the urea cycle, a met abolic pathway that removes ammonia by turning it into the neutral substance urea. LOL A is here combined with lactulose and rifaximin to improve effectiveness at controlling s ymptoms.

* Herpes Zoster

Malacards - https://www.malacards.org/card/herpes_zoster -genetic pathways data as of May 2021 translated into Hz.

GENETIC PATHWAYS

TLR3 TLR2 PDCD1 IL2 IL10 IFNG
IL2 IL10 IFNG IFNA2 IFNA1 HLA-DRB1
TLR3 TLR2 IL2 IL10 IFNG IFNA2
TLR3 TLR2 IL2 IFNA2 IFNA1 HLA-B
TLR3 TLR2 IFNA2 IFNA1 HLA-B HLA-A
TLR3 TLR2 IFNG IFNA2 IFNA1 HLA-DRB1
TLR2 IL2 IL10 IFNG HLA-DRB1
TLR2 PDCD1 IL2 IL10 IFNG CD8A
IFNG IFNA2 IFNA1 HLA-DRB1 HLA-B HLA-A
TLR3 TLR2 IL2 IFNG IFNA2 IFNA1
IL2 IL10 IFNG IFNA2 IFNA1
IL2 IFNG IFNA2 IFNA1 HLA-B HLA-A

GENES USED

-TLR3 Toll Like Receptor 3 - 699.594
-TLR2 Toll Like Receptor 2 - 605.322
-PDCD1 Programmed Cell Death 1 - 579.633
-IL2 Interleukin 2 - 877.644
-IL10 Interleukin 10 - 375.780
-IFNG Interferon Gamma - 963.279
-IFNA2 Interferon Alpha 2 - 394.701
-IFNA1 Interferon Alpha 1 - 397.908
-HLA-DRB1 Major Histocompatibility Complex Class II DR Beta 1 - 552.015
-HLA-B Major Histocompatibility Complex Class I B - 741.051
-HLA-A Major Histocompatibility Complex Class I A - 748.119
-CD8A CD8a Molecule - 471.243

SOUND FREQUENCIES

699.594	605.322	579.633	877.644	375.780	963.279
877.644	375.780	963.279	394.701	397.908	552.015
699.594	605.322	877.644	375.780	963.279	394.701
699.594	605.322	877.644	394.701	397.908	741.051
699.594	605.322	394.701	397.908	741.051	748.119
699.594	605.322	963.279	394.701	397.908	552.015
605.322	877.644	375.780	963.279	552.015	
605.322	579.633	877.644	375.780	963.279	471.243
963.279	394.701	397.908	552.015	741.051	748.119
699.594	605.322	877.644	963.279	394.701	397.908
877.644	375.780	963.279	394.701	397.908	
877.644	963.279	394.701	397.908	741.051	748.119

* Herpes Zoster Mix, each group plays for 6m.
Valomaciclovir stearate is a DNA polymerase inhibitor potentially for treatment of acute herpes zoster and EB virus infection. Valomaciclovir stearate is an orally available, smal l molecule drug with broad-spectrum antiviral activity against a variety of important herp esviruses, including Epstein-Barr virus, or EBV (the first virus to be directly associated w ith human cancer), varicella zoster virus, or herpes zoster (cause of shingles), and herp es simplex virus 1 and 2.
-Omaciclovir is a DNA-directed DNA polymerase inhibitor potentially for the treatment of HSV infection. Omaciclovir is selectively phosphorylated by viral thymidine kinase to its monophosphate form and is further modified to a triphosphate, which is an inhibitor of V ZV DNA polymerase.
-Mycophenolate mofetil is a mycophenolic acid that is chemically altered by the addition of morpholinoethylester; selective and reversible inhibitor of inosine monophosphate de hydrogenase. Used here as immunosuppressive to enhance EPB-348.

-Brivudine is an antiviral drug used in the treatment of herpes zoster. The drug is contrai ndicated in patients undergoing immunosuppression (for example because of an organ t ransplant) or cancer therapy, especially with fluorouracil (5-FU) and chemically related (pro)drugs such as capecitabine and tegafur, as well as the antimycotic drug flucytosine, which is also related to 5-FU.
-Sorivudine is a nucleoside analogue antiviral drug. Sorivudine interacts strongly and in some cases lethally with fluorouracil (5-FU), its prodrugs and related substances. This is based on the metabolite bromovinyluracil (BVU), which irreversibly inhibits the enzyme dihydropyrimidine dehydrogenase (DPD) which is necessary for inactivating 5-FU. The closely related drug brivudine has the same interaction.

-Amenamevir is an antiviral drug used for the treatment of shingles (herpes zoster). It ac ts as an inhibitor of helicase-primase.
-Pritelivir is an antiviral helicase-primase complex inhibitor.

-Valaciclovir is an antiviral medication used to treat outbreaks of herpes simplex or herp es zoster (shingles). It is also used to prevent cytomegalovirus following a kidney transp

lant in high risk cases.
-Famciclovir is a guanosine analogue antiviral drug used for the treatment of various her pesvirus infections, most commonly for herpes zoster (shingles).

- EMA401 is a drug under development for the treatment of peripheral neuropathic pain. It was initially established as a potential drug option for patients suffering pain caused b y postherpetic neuralgia.
- Funapide is a novel analgesic for the treatment of a variety of chronic pain conditions, i ncluding osteoarthritis, neuropathic pain, postherpetic neuralgia, and erythromelalgia, a s well as dental pain.
-Tetrachlorodecaoxide (TCDO) is a chlorite-containing, immunomodulatory, macrophag e-activating drug. Anecdotal evidence shows it was of benefit in the treatment of va ricella zoster.
-Idoxuridine with DMSO, highly effective in shortening the period of pain and improving skin healing in trigeminal zoster, while no effect of IDU was observed in thoracic zoster.

* ISRIB (integrated stress response inhibitor) is a compound used in Pulmonary Fibrosis due to asbestos, nerve degeneration, cognitive dysfunction and neurodegenerative dise ases. It has been shown to inhibit eIF2alpha phosphorylation-induced stress granule (S G) formation. Since eIF2alpha phosphorylation is known to be involved in memory form ation, ISRIB was tested to see whether it would be active in vivo, and was found to readi ly cross the blood-brain barrier, with a half-life of eight hours. Subsequent testing in 201 3 found ISRIB to produce significant nootropic effects in mice, as measured by enhance ment of spatial and fear-associated learning in standard water-maze and conditioned en vironment tests. Testing in 2017 indicated the experimental drug improved the ability of brain-injured mice to learn and form memories on memory tests, thus appearing to rever se impairments from traumatic brain injury. ISRIB treatment also corrects spatial memor y deficits and improves working memory in aged mice. Further research on the drug has shown that the molecule restored memory formation in mice months after traumatic brai n injuries. It also has shown potential in treating neurodegenerative diseases such as Al zheimer’s, Parkinson’s, and Lou Gehrig’s disease (also known as amyotrophic lateral sc lerosis, or ALS). In mice, it has reduced age-related cognitive decline and given healthy mice improved memory.

* L-Ornithine phenylacetate. Hepatic encephalopathy (HE) is a common neuropsychiatr ic complication of liver disease affecting about 20-30% patients with cirrhosis. HE may o nly affect quality of life (e.g. impairments in attention; coordination; driving ability), but in some patients this progresses to coma and death; defining mortality in those with acute liver failure. HE is thought to occur through accumulation of ammonia as a by-product of protein metabolism. In liver failure ammonia accumulates to toxic levels, resulting in am monia-associated brain swelling. The combination of l-ornithine (amino acid) with phenyl actetate, as l-ornithine phenylacetate (OP), reduces toxic levels of ammonia by (1) l-orni thine acting as a substrate for glutamine synthesis from ammonia in skeletal muscle and (2) phenylacetate excreting the ornithine-related glutamine as phenylacetylglutamine in t he kidneys. As both l-ornithine and phenylacetate are already available for human use, data showing its usefulness in ammonia lowering could translate quickly into providing t

he much needed therapy for HE patients.

* MEAI or 5-methoxy-2-aminoindane is a recreational drug and binge drinking preventio n drug, first chemically described in 1980. The serotonin 1A receptor or 5-HT1A is assoc iated with controlling craving behaviour across the board. This indicates that MEAI may have a wide range of applications beyond binge drinking. MEAI, a psychoactive amphet amine analog, gives a “pleasant inebriation” whose effects resemble those felt when dri nking alcohol, without the nausea, confusion, or a hangover. MEAI is not addictive, but s elf-limiting. It is a synthetic drug which confers a mild inebriation along with a feeling of c ontentedness that curbs overconsumption and excessive drinking. Like an ‘enough’ swit ch, MEAI signals to the brain that it is satisfied, that it wants nothing. It has been toxicol ogically shown to render no physiological harm, according to claims. MEAI shows promi se for Alcohol Use Disorder, in which an individual cannot limit their alcohol intake despit e negative consequences.

* Methylcobalamin-Adenosylcobalamin are the two forms of vitamin B12 that are co-enz ymes: the body requires each of them for different reactions. Methycobalamin and aden osylcobalamin provide great benefit to the body, but in different manners. Both are esse ntial to providing coenzyme or active vitamin B12 to different parts of tissues. They are o ften used together as team players. Methylcobalamin is found within the fluid inside cell s. It is prevalent in the blood and other fluids in the body. Methylcobalamin is also used i n the treatment of peripheral neuropathy, diabetic neuropathy, and as a preliminary treat ment for amyotrophic lateral sclerosis. Think of adenosylcobalamin as the super B12 for the three M’s – mitochondria, myelin, and methylation. It works synergistically with methylcobalamin and fills in gaps that methylcobalamin can’t fully do. Because adenosylcobalamin helps mitochondria burn food more efficiently for better energy production and metabolism, it may be used as preventive or functionally supportive role in protecting the mitochondria.

* Naftopidil is a drug used in benign prostatic hypertrophy which acts as a selective alpha1-adrenergic receptor antagonist or alpha blocker. Naftopidil is also known as an ameliorating agent for dysuria and overactive bladder (also effective in females) associated with benign prostatic hyperplasia.

* Neuropathic Pain Mix (without Gabapentin Enacarbil) is a combination of,
- CR-4056 is an analgesic drug candidate with a novel mechanism of action, acting as a ligand for the imidazoline receptor I2. It showed promising results in animal studies against various types of neuropathic pain, and has reached Phase II human clinical trials as a potential treatment for pain associated with osteoarthritis.
- Bicifadine has a non-opioid, non-NSAID mechanism for the treatment of pain, which should have less abuse potential than opioid drugs and less propensity to cause gastric ulcers than NSAID drugs. While the drug is purported to be a serotonin (SERT) and noradrenaline transporter (NET) inhibitor, it also has effects at the dopamine transporter (DAT), effectively making it a broad-spectrum monoamine transporter inhibitor or "triple reuptake inhibitor.
- E-52862, also known as sigma-1 receptor antagonist (S1A, S1RA), is a selective

sigma-1 receptor antagonist, In preclinical studies, S1RA has demonstrated efficacy in relieving neuropathic pain and pain in other sensitizing conditions, associated with an improvement of the emotional negative state.
- Funapide is a novel analgesic for the treatment of a variety of chronic pain conditions, including osteoarthritis, neuropathic pain, postherpetic neuralgia, and erythromelalgia, as well as dental pain. It acts as a small-molecule Nav1.7 and Nav1.8 voltage-gated sodium channel blocker.
- EMA401 is a drug under development for the treatment of peripheral neuropathic pain. It was initially established as a potential drug option for patients suffering pain caused by postherpetic neuralgia. It may also be useful for treating various types of chronic neuropathic pains caused by lesions and other diseases affecting the somatosensory system in addition to postherpetic neuralgia. EMA401 has been implicated in alleviating pains associated with a host of neural abnormalities, ranging from excessive nerve sprouting due to damaged nerve caused by shingles, diabetes, osteoarthritis, HIV and chemotherapy. EMA401 is more effective and has virtually no central nervous system side effects in comparison. EMA401 is the first drug on the market that targets angiotensin II type 2 receptors (AT2R) with high affinity but has a low affinity for angiotensin II type 1 receptors.

* Neuropathic Pain Sleep Mix (without Gabapentin Enacarbil) is a combination of the compounds in Neuropathic Pain Mix plus Glycine. Glycine can have a cooling effect on the brain and body. Glycine has been associated with a decrease in the body’s core temperature. As body temperature declines, so does heat production, followed by an increase in heat loss. All three of these thermoregulation techniques are the body’s way of promoting sleep onset and slow brain wave activity.
Conversely, the body’s core temperature begins to increase a few hours prior to waking.

* Neuropathic Pain Mix2 is a combination of,
- CR-4056 is an analgesic drug candidate with a novel mechanism of action, acting as a ligand for the imidazoline receptor I2. It showed promising results in animal studies against various types of neuropathic pain, and has reached Phase II human clinical trials as a potential treatment for pain associated with osteoarthritis.
- Bicifadine has a non-opioid, non-NSAID mechanism for the treatment of pain, which should have less abuse potential than opioid drugs and less propensity to cause gastric ulcers than NSAID drugs. While the drug is purported to be a serotonin (SERT) and noradrenaline transporter (NET) inhibitor, it also has effects at the dopamine transporter (DAT), effectively making it a broad-spectrum monoamine transporter inhibitor or "triple reuptake inhibitor.
- E-52862, also known as sigma-1 receptor antagonist (S1A, S1RA), is a selective sigma-1 receptor antagonist, In preclinical studies, S1RA has demonstrated efficacy in relieving neuropathic pain and pain in other sensitizing conditions, associated with an improvement of the emotional negative state.
- Funapide is a novel analgesic for the treatment of a variety of chronic pain conditions, including osteoarthritis, neuropathic pain, postherpetic neuralgia, and erythromelalgia, as well as dental pain. It acts as a small-molecule Nav1.7 and Nav1.8 voltage-gated sodium channel blocker.

- Gabapentin enacarbil is an anticonvulsant and analgesic drug of the gabapentinoid class, and a prodrug to anticonvulsant gabapentin. It was designed for increased oral bioavailability over gabapentin, and human trials showed it to produce extended release of gabapentin with almost twice the overall bioavailability, especially when taken with a fatty meal. t has been shown in vitro to interact with voltage-gated calcium channels to decrease the calcium influx from the presynaptic nerve terminals thereby inhibiting excitatory neurotransmission. Gabapentin structurally resembles the neurotransmitter, gamma aminobutyric acid (GABA). It is possible that this similarity is related to gabapentin's mechanism of action. In animal models used for testing the anti-seizure and anti-pain (analgesic) activities of drugs, gabapentin prevents seizures and reduces pain-related responses. Gabapentin enacarbil has passed human clinical trials for the treatment of restless legs syndrome and postherpetic neuralgia, and initial results have shown it to be well tolerated and reasonably effective.
- EMA401 is a drug under development for the treatment of peripheral neuropathic pain. It was initially established as a potential drug option for patients suffering pain caused by postherpetic neuralgia. It may also be useful for treating various types of chronic neuropathic pains caused by lesions and other diseases affecting the somatosensory system in addition to postherpetic neuralgia. EMA401 has been implicated in alleviating pains associated with a host of neural abnormalities, ranging from excessive nerve sprouting due to damaged nerve caused by shingles, diabetes, osteoarthritis, HIV and chemotherapy. EMA401 is more effective and has virtually no central nervous system side effects in comparison. EMA401 is the first drug on the market that targets angiotensin II type 2 receptors (AT2R) with high affinity but has a low affinity for angiotensin II type 1 receptors.

* Neuropathic Pain Sleep Mix2 is a combination of the compounds in Neuropathic Pain Mix2 -EMA401 not included- plus Glycine. Glycine can have a cooling effect on the brain and body. Glycine has been associated with a decrease in the body’s core temperature. As body temperature declines, so does heat production, followed by an increase in heat loss. All three of these thermoregulation techniques are the body’s way of promoting sleep onset and slow brain wave activity. Conversely, the body’s core temperature begins to increase a few hours prior to waking.

* Nitroglycerin is a medication used for heart failure, high blood pressure, anal fissures, painful periods, and to treat and prevent chest pain caused by decreased blood flow to the heart (angina) or due to the recreational use of cocaine. This includes chest pain from a heart attack. Common side effects include headache and low blood pressure. The low blood pressure can be severe. It is unclear if use in pregnancy is safe for the baby. It should not be used together with medications within the sildenafil (PDE5 inhibitor) family due to the risk of low blood pressure. Nitroglycerin is in the nitrate family of medications. While it is not entirely clear how it works, it is believed to function by dilating blood vessels. Tentative evidence indicates efficacy of glyceryl trinitrate in the treatment of various tendinopathies, both in pain management and acceleration of soft tissue repair.

* Omecamtiv Mecarbil is a novel cardiac muscle activator. Omecamtiv Mecarbil has

been used in trials studying the treatment and basic science of Heart Failure, Echocardiogram, Pharmacokinetics, Chronic Heart Failure, and History of Chronic Heart Failure, among others.Omecamtiv Mecarbil is a cardiac-specific myosin activator. It is being studied for a potential role in the treatment of left ventricular systolic heart failure. Systolic heart failure involves a loss of effective actin-myosin cross bridges in the myocytes (heart muscle cells) of the left ventricle, which leads to a decreased ability of the heart to move blood through the body. This causes peripheral edema (blood pooling), which the sympathetic nervous system tries to correct by overstimulating the cardiac myocytes, leading to left ventricular hypertrophy, another characteristic of chronic heart failure. Current inotropic therapies work by increasing the force of cardiac contraction, such as through calcium conduction or modulating adrenoreceptors. But these are limited by adverse events, including arrhythmias related to increased myocardial oxygen consumption, desensitization of adrenergic receptors, and altering intracellular calcium levels. Inotropes are also thought to be associated with worse prognosis. Therefore, the novel mechanism of omecamtiv mecarbil may offer a useful new option for heart failure.

* Primaxin IV (intravenous therapy) is a combination of imipenem, cilastatin sodium, water and sodium bicarbonate which is added as a buffer. Primaxin IM lacks the sodium bicarbonate buffer. mipenem / cilastatin is an antibiotic useful for the treatment of a number of bacterial infections. It is made from a combination of imipenem and cilastatin. Specifically it is used for pneumonia, intra-abdominal infections, lower respiratory tract infections, urinary tract infections, gynecologic infections, bacterial sepsis, bone and joint infections, skin and skin structure infections, endocarditis and polymicrobic infections. It has been applied as a temporary embolic agent in musculoskeletal (MSK) embolotherapy. While the therapeutic potential of IPM/CS as an embolic agent for pain relief has been demonstrated in osteoarthritis (OA) and tendinopathy, its characteristics, mechanism of action, and the manner in which a temporary embolic induces longstanding clinical effects remain unclear.

* Shingrix Herpes Zoster Vaccine 1&2 is a herpes zoster vaccine which appears to prevent more cases of shingles than Zostavax, although side effects seem to be more frequent (and it requires two doses). Zoster vaccination is used to prevent shingles and its complications, including postherpetic neuralgia. It can be considered a therapeutic vaccine, given that it is used to treat a latent virus that has remained dormant in cells since chicken pox infection earlier in life. The two available zoster vaccines are intended for use in people over the age of 50. Booster doses are not indicated for either vaccine, since there is little evidence of any significant reduction in immunity in the years following vaccination. The Advisory Committee on Immunization Practices (ACIP) in the United States recommends Shingrix for adults over the age of 50, including those who have already received Zostavax. The Committee voted that Shingrix is preferred over Zostavax for the prevention of zoster and related complications because data showed vaccine efficacy of more than 90% against shingles across all age groups, as well as sustained efficacy over a 4-year follow-up. Unlike Zostavax, which is given as a single shot, Shingrix is given as two intramuscular doses, two to six months apart. The absolute decrease in risk of herpes zoster following immunization over three and a half

years is 3.3% (3.54% down to 0.28%) while the decrease in the risk of postherpetic neuralgia is 0.3% (0.34% down to 0.06%).

* Varespladib sodium is a sodium salt of varespladib designed for intravenous delivery. Snakebite envenomation can cause local tissue damage, with edema, hemorrhage, myonecrosis, and systemic toxic responses, including organ failure. In an early report on inhibition of snake venom toxicities, Varespladib showed strong inhibition of 28 types of svPLA2s from six continents. Furthermore, edema in gastrocnemius muscle was also attenuated. The sPLA2 inhibitor, varespladib sodium was highly effective in preventing lethality following experimental envenoming by M. fulvius in a porcine animal model. Co-crystallization of Varespladib with MjTX-II toxin revealed that the compound binds to a hydrophobic channel of the protein. Such interaction blocks fatty acids binding, thus inhibiting allosteric activation of the toxin. This leads to the toxin losing its ability to disrupt cell membranes. sPLA2 remodels lipoproteins, notably low-density lipoproteins (LDL) and their receptors, which are responsible for removing cholesterol from the body. This remodeling can lead to increased deposition of LDL and cholesterol in the artery wall. In combination with chronic vascular inflammation, these deposits lead to atherosclerosis. New research suggests that coronavirus ravages the body like the neurotoxins from rattlesnake venom, according to the analysis targeting the enzyme, which causes severe inflammation, could better treat and save the lives of COVID-19 patients amid the virus' resurgence with the Delta variant. Ironically, the human body contains the secreted A2 phospholipase group (sPLA2-IIA) in low concentrations, with the enzyme protecting the organism from microbes and fighting off infections. But in high quantities, sPLA2-IIA is perilous to humans as it can "shred" vital organs.

* ZFYVE27 Factor (Protrudin) Protrudin promotes regeneration by functioning as a scaffold to link axonal organelles, motors and membranes, establishing important roles for these cellular components in mediating regeneration in the adult central nervous system. Down-regulation of protrudin by RNA interference induced membrane extension in all directions and inhibited neurite formation. Moreover, nerve cells in the central nervous system lose the ability to regenerate their axons as they mature, so have very limited capacity for regrowth. This also means that injuries to the brain, spinal cord and optic nerve have life-altering consequences. It's possible that increased or activated Protrudin might be used to boost regeneration in the injured spinal cord. Glaucoma causes harm to retinal ganglion cells - the cells at the back of the eye which relay visual information to the brain. Their long, tail-like axons pass along the optic nerve, which functions rather like the cable connecting a camera to a computer. The researchers have identified protrudin as "the strongest promoter of optic nerve regeneration we have yet encountered".

* Zostavax Herpes Zoster Vaccine is effective in preventing herpes zoster disease for up to three years. Zostavax was shown to reduce the incidence of shingles by 51% in a study of 38,000 adults aged 60 and older who received the vaccine. The vaccine also reduced by 67% the number of cases of postherpetic neuralgia (PHN) and reduced the severity and duration of pain and discomfort associated with shingles, by 61%. The FDA originally recommended it for individuals 60 years of age or older who are not severely

allergic to any of its components and who meet the following requirements: does not have a weakened immune system due to HIV/AIDS or another disease or medications (such as steroids, radiation and chemotherapy) that affect the immune system; does not have a history of cancer affecting the bone marrow or lymphatic system, such as leukemia or lymphoma; and does not have active, untreated tuberculosis. It can be considered a therapeutic vaccine, given that it is used to treat a latent virus that has remained dormant in cells since chicken pox infection earlier in life. The two available zoster vaccines are intended for use in people over the age of 50. Booster doses are not indicated for either vaccine, since there is little evidence of any significant reduction in immunity in the years following vaccination. In 2006, the U.S. Advisory Committee on Immunization Practices (ACIP) recommended that the live vaccine be given to all adults age 60 and over, including those who have had a previous episode of shingles] and those who do not recall having had chickenpox, since more than 99% of Americans ages 40 and older have had chickenpox.

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Arimoclomol; Benzonatate; Centhaquin-HS; Coblopasvir; CPP-115; CORM-2; CORM-3; Cuspin-1; Diosmin-Rutin; Esketamine; Esreboxetine-TRK 700; Ginkgo Biloba Tonic; Lic ofelone; Musculoskeletal Injury Mix; Nicotine; PR1P peptide; Pracinostat; Pralnacasan; PYY peptide-long; Runcaciguat; SW-03329; Tafamidis; Tenapanor-A250; Terevalefim; T etrachlorodecaoxide; Tezacaftor; Tolimidone; Tropisetron; VPS35 Factor; WAY-315193

* Arimoclomol is a drug candidate to treat insulin resistance and diabetic complications s uch as retinopathy, neuropathy and nephropathy. Arimoclomol is believed to function by stimulating a normal cellular protein repair pathway through the activation of molecular c haperones. Since damaged proteins, called aggregates, are thought to play a role in ma ny diseases. Arimoclomol activates the heat shock response. It is believed to act at Hsp 70. Arimoclomol has been shown to extend life in an animal model of ALS and was well tolerated in healthy human volunteers in a Phase I study. Arimoclomol also has been sh own to be an effective treatment in an animal model of Spinal Bulbar Muscular Atrophy (SBMA, also known as Kennedy's Disease).

* Benzonatate is a prescription non-opioid alternative for the symptomatic relief of refrac tory cough. It has been shown to improve cough associated with a variety of respiratory conditions including asthma, bronchitis, pneumonia, tuberculosis, pneumothorax, opiat e-resistant cough in lung cancer, and emphysema. Benzonatate also reduces the consis tency and volume of sputum production associated with cough in those with chronic obs tructive pulmonary disorder (COPD). Compared to codeine, benzonatate has been sho wn to be more effective in reducing the frequency of induced cough in experiments. Ben zonatate does not treat the underlying cause of the cough. Benzonatate has been show n to have use in the suppression of hiccups. Similar to other local anesthetics, benzonat

ate is a potent voltage-gated sodium channel inhibitor. After absorption and circulation t o the respiratory tract, benzonatate acts as a local anesthetic, decreasing the sensitivity of vagal afferent fibers and stretch receptors in the bronchi, alveoli, and pleura in the lo wer airway and lung. This dampens their activity and reduces the cough reflex. Benzona tate also has central antitussive activity on the cough center in central nervous system a t the level of the medulla. However, there is minimal inhibition of the respiratory center a t a therapeutic dosage.

* Centhaquin-HS is a hypertonic saline solution of centhaquin citrate dihydrate. Centhaq uin enhances the resuscitative effect of hypertonic saline (HS). Large volume resuscitati on has been used by emergency medical personnel and surgeons to reverse hemorrha gic shock and to restore end-organ perfusion and tissue oxygenation. Centhaquin is an Alpha 1 adrenergic receptor antagonist and Alpha 2 adrenergic receptor agonist used a s analgesic, antihaemorrhagic, antihypertensive, and in cardiovascular therapies such a s haemorrhagic shock (Adjuvant therapy) , heart arrest , postoperative pain and as resu scitative agent for hypovolemic shock. Centhaquin is a compound that produces hypote nsion and bradycardia in higher doses and resuscitation in lower doses. Shock due to s evere hemorrhage accounts for a large proportion of posttraumatic deaths, particularly d uring early stages of injury. A majority of deaths due to hemorrhage occur within the first six hours after trauma, but many of these deaths can be prevented. Shock is accompani ed by circulatory failure which is the primary cause of mortality and morbidity. Therefore, a need exists in the art for a resuscitation agent that improves survival time, and can be used with a small volume of resuscitation fluid, for resuscitation in hypovolemic shock. T he recording inludes the sound frequencies of centhaquin citrate dihydrate, sodium chlo ride and water.

* Coblopasvir dihydrochloride is an antiviral drug candidate for the treatment of hepatitis C virus infection. Hepatitis C virus (HCV), or hepatitis C virus infection, is a chronic bloo d-borne infection. Studies have shown that 40% of chronic liver diseases are associated with HCV infection, and an estimated 8,000-10,000 people die each year. HCV-related e nd-stage liver disease is the most common indication for liver transplantation in adults. Because the risk of HCV-related chronic liver disease is related to the duration of HCV i nfection, and the risk of cirrhosis increases in patients who have been infected for more than 20 years, chronic liver disease often progresses to advanced stages with cirrhosis, ascites, jaundice, and rupture of varicose veins. Brain disease, and progressive liver fail ure, and the risk of liver cancer is also significantly increased.

* CPP-115 is a 4-aminobutyrate transaminase inhibitor, causing increased levels of GA BA, gamma-aminobutyric acid, the chief inhibitory neurotransmitter in humans. It is used for the treatment of Gilles de la Tourette’s syndrome, infantile spasms, partial epilepsies, drug abuse, cocaine dependency and post traumatic stress disorder. Mechanistically, C PP-115 binds to GABA-AT, undergoing product transformation that kills GABA-AT’s func tion. In rat studies, CPP-115 suppressed spasms at a much lower dose (0.1 mg/kg) than Sabril (>200 mg/kg) and exhibited better tolerance without visual defects. In preclinical s tudies CPP-115 has been shown to have potentially significant advantages compared to the only approved and marketed current GABA-AT inhibitor (vigabatrin). The hydrochlori

de salt of CPP-115 has been granted orphan drug designation by the EMA for the treat ment of West syndrome, an epileptic disorder of young children which causes developm ental problems.

* CORM-2-DMSO. Carbon monoxide (CO)-releasing molecules (CORMs) are used to d eliver CO, a biological ‘gasotransmitter’, in biological chemistry and biomedicine. CORM s kill bacteria in culture and in animal models, but are reportedly benign towards mamm alian cells. CORM-2 (tricarbonyldichlororuthenium(II) dimer, Ru2Cl4(CO)6), the first wid ely used and commercially available CORM, displays numerous pharmacological, bioch emical and microbiological activities, generally attributed to CO release. Unlike CORM-3, which is water-soluble, CORM-2 requires solubilisation in DMSO where it undergoes ex tensive ligand exchange with the solvent and isomerises with implications for CO releas e. Thus far, the amount of CO released from CORM-2 is inadequate to explain its toxicit y. Rather, CORM-2 reacts with thiol-containing compounds, of which cysteine (free and i n proteins) and reduced glutathione are key players in its physiological effects. These re actions dramatically reduce the toxic effects of CORM-2. While the biological chemistry of Ru complexes is far from completely understood , the toxic effects of Ru CORMs on bacterial and (by extrapolation) mammalian cells can now be largely attributed to the ch emical reactivity of Ru, and not CO. CORM-2 has therapeutic effect in heart diseases, h ypertrophy, neuralgia, stomach diseases.

* CORM 3 is a ruthenium coordination entity that acts as a water-soluble carbon monoxi de-releasing molecule. It has a role as a nephroprotective agent, an antibacterial agent, an anti-inflammatory agent, an anticoagulant, an EC 1.11.2.2 (myeloperoxidase) inhibito r, a neuroprotective agent and a mitochondrial respiratory-chain inhibitor. It is a metal ca rbonyl and a ruthenium coordination entity.

* Cuspin-1 is small molecule upregulator of the Survival of Motor Neuron protein (SMN), whose decreased levels cause the neurodegenerative disease spinal muscular atrophy (SMA). Mechanistic studies of cuspin-1 revealed that increasing Ras signaling upregulat es SMN protein abundance via an increase in translation rate. These findings suggest t hat controlled modulation of the Ras signaling pathway may benefit patients with spinal muscular atrophy (SMA). (DOI: 10.1021/cb300374h)

* Diosmin-Rutin. Diosmin is a naturally occurring flavonoid glycoside strengthens vascul ar walls. Diosmin is a protecting agent and is used for the treatment of chronic venous i nsufficiency, lymphedema, hemorrhoids and varicose veins. It has been also used for ot her therapeutic purposes such as cancer, premenstrual syndrome, colitis, and diabetes. An oral phlebotropic drug used in the treatment of venous disease, i.e., chronic venous i nsufficiency (CVI) including spider and varicose veins, leg swelling (edema), stasis der matitis and venous ulcers. It is also used as a stand-alone or surgical adjunctive therapy in hemorrhoidal disease (HD). There are extensive clinical trials that show diosmin impr oves all stages of venous disease including venous ulcers and improves quality of life. T here are no prospective studies in arterial disease. Diosmin has been found to be effecti ve in mitigating hyperglycemia in diabetic rats. It is also speculated that diosmin might h ave potential in the treatment of neurodegenerative diseases, such as Alzheimer’s disea

se. Diosmin improves lymphatic drainage by increasing the frequency and intensity of ly mphatic contractions, and by increasing the total number of functional lymphatic capillari es. Diosmin prolongs the vasoconstrictor effect of norepinephrine on the vein wall, incre asing venous tone, and therefore reducing venous capacitance, distensibility, and stasis. This increases the venous return and reduces venous hyperpressure present in patient s suffering from CVI. Diosmin reduces the expression of endothelial adhesion molecules (ICAM1, VCAM1), and inhibits the adhesion, migration, and activation of leukocytes at t he capillary level. This leads to a reduction in the release of inflammatory mediators, pri ncipally oxygen free radicals and prostaglandins (PGE2, PGF2a). Rutin also called ruto side, is the glycoside flavonoid found in a certain fruits and vegetables. In a clinical trial, rutin was found to aid control of intraocular pressure in patients with primary open angle glaucoma. Traditionally, rutin is used to prevent mucositis due to cancer treatment, to tre at blood vessel disease such as varicose veins, bleeding, hemorrhoids.

* Esketamine is a medication used as a general anesthetic and for treatment-resistant d epression. Esketamine acts primarily as a non-competitive N-methyl-D-aspartate (NMD A) receptor antagonist. It also acts to some extent as a dopamine reuptake inhibitor but, unlike ketamine, does not interact with the sigma receptors. The compound is the S(+) e nantiomer of ketamine, which is an anesthetic and dissociative similarly. Esketamine is a general anesthetic and is used for similar indications as ketamine. Such uses include i nduction of anesthesia in high-risk patients such as those with hemorrhagic shock, anap hylactic shock, septic shock, severe bronchospasm, severe hepatic insufficiency, cardia c tamponade, and constrictive pericarditis; anesthesia in caesarian section; use of multi ple anesthetics in burns; and as a supplement to regional anesthesia with incomplete ne rve blocks. Similarly to ketamine, esketamine appears to be a rapid-acting antidepressa nt. Most common side effects when used in those with treatment resistant depression in clude dissociation, dizziness, nausea, sleepiness, anxiety, and increased blood pressur e.

* Esreboxetine-TRK 700. Esreboxetine succinate is a selective norepinephrine reuptake inhibitor for the treatment of neuropathic pain, fibromyalgia and a variety of other indicati ons.. It is the (S,S)-(+)-enantiomer of reboxetine and is even more selective in comparis on. TRK 700 is an analgesic drug for the treatment of neuropathic pain, postherpetic ne uralgia and fibromyalgia. Fibromyalgia is a disease in which systemic pain is the main s ymptom and neuropsychiatric symptoms and autonomic nervous system symptoms are secondary symptoms.

* Ginkgo Biloba Tonic. Ginkgo biloba has been used for centuries as part of the ancient Chinese pharmacopoeia in the treatment of respiratory ailments, cognitive impairment, and circulatory disorders. In recent years, Ginkgo has gained great worldwide acceptan ce for treatment of a number of medical conditions including tinnitus, cognitive decline in dementia, intermittent claudication, asthma, macular degeneration and, most recently, a ntidepressant induced sexual dysfunction. Case reports have confirmed GBE’s benefici al effect on ASD. An open clinical trial of Ginkgo biloba extract with 63 patients was foun d to be effective in 84% of patients with ASD. All phases of the sexual response cycle w ere improved (desire, excitement, orgasm and resolution). Minimal side effects were rep

orted which included gastrointestinal upset, headache, CNS stimulation and easy bruisa bility. There were no serious adverse events. Possible mechanisms of action may includ e improved circulation and prostaglandin agonist effects, as well as neurotransmitter an d nitric oxide second messenger modulation. Although Ginkgo biloba is relatively safe, it also works as a potent inhibitor of platelet activating factor. Therefore, patients taking as pirin, nonsteroidal anti-inflammatory agents, and anti-coagulants, or patients with a coag ulopathy should consult a physician and exercise caution when considering adding GBE to their existing regimen. The bilobalides, ginkgolides, flavonoids, and other substances unique to the tree restore better blood flow to all parts of the body but particularly to the brain, allowing improved use of oxygen. Ginkgo's antioxidant actions also stabilize the s tructure of brain and nerve cells and protect them from oxidative attacks from free radic als. Research indicates ginkgo action of supporting healthier circulation in the eyes, ma ke it an herb of choice for natural treatment eye health and macular degeneration. Gink go's hallmark effect is increased circulation, which is important in maintaining our energ y level and one of the factors in stopping early hair loss. Increasing genital blood flow he ightens responsiveness, making for higher libido in both men and women. Good circulati on means getting the full benefit from the foods we eat and the vitamins and herbal sup plements we take. Medicinal uses: Allergies, Alopecia, Asthma, Bronchitis, Circulation, E yes/Vision, Libido, Longevity Tonics, Memory/Focus, Varicose Veins. Properties: Anti-inf lammatory, AntiCancer, Antioxidant, Antitussive, Astringent, Cardiac tonic Cordial, Tonic, Vasodilator, Vermifuge. The extract contains flavone glycosides (quercetin, kaempferol, and isorhamnetin) and terpene lactones (GB, ginkgolides A, B, and C, and bilobalide).

* Licofelone is a dual COX/LOX inhibitor that was studied in clinical trials as a treatment for osteoarthritis. Licofelone is both an analgesic and an anti-inflammatory. Inhibition of 5-lipoxygenase (5-LOX) may reduce the gastrointestinal toxicity associated with other n onsteroidal anti-inflammatory drugs (NSAID), which only inhibit cyclooxygenase (COX). Licofelone is the first drug to inhibit both.

* Musculoskeletal Injury Mix is based upon the idea that Hypericin and Chlorogenic acid can help cure musculoskeletal trauma, Bromelain is a natural remedy to help reduce infl ammation, Hydroxytyrosol and Vitamin E can help reduce pain. St. John's wort' Hyperic in appears to inhibit the neuronal uptake of serotonin, norepinephrine, dopamine, gamm a-amino butyric acid (GABA) and L-glutamate, which may contribute to its antidepressa nt effect. Hypericin may also prevent the replication of encapsulated viruses probably du e to inhibition of the assembly and shedding of virus particles in infected cells. St. John' s wort' Chlorogenic acid is antioxidant, antibacterial, hepatoprotective, cardioprotective, anti-inflammatory, antipyretic, neuroprotective, anti-obesity, antiviral, anti-microbial, anti-hypertension, free radicals scavenger and a central nervous system stimulator. Bromela in is an anti-inflammatory and is used in treating tendinitis, arthritis and swelling and pai n related to muscle injuries. Hydroxytyrosol affects the expression of various component s of the inflammatory response, possibly through the modulation of the nuclear factor-ka ppa B (NF-kB) pathway. The effects include the modulation of pro-inflammatory cytokine s, such as the inhibition of interleukin-1alpha (IL-1a), IL-1beta, IL-6, IL-12, and tumor ne crosis factor-alpha (TNF-a); increased secretion of the anti-inflammatory cytokine IL-10; inhibition of the production of certain chemokines, such as C-X-C motif chemokine ligan

d 10 (CXCL10/IP-10), C-C motif chemokine ligand 2 (CCL2/MCP-1), and macrophage i nflammatory protein-1beta (CCL4/MIP-1b); and inhibition of the expression of the enzy mes inducible nitric oxide synthase (iNOS/NOS2) and prostaglandin E2 synthase (PGE S), which prevent the production of nitric oxide (NO) and prostaglandin E (PGE2), respe ctively. In addition, hydroxytyrosol is able to regulate the expression of other genes invol ved in the regulation of tumor cell proliferation, such as extracellular signal-regulated an d cyclin-dependent kinases. Also, hydroxytyrosol scavenges free radicals and prevents oxidative DNA damage. This induces apoptosis and inhibits proliferation in susceptible c ancer cells. Hydroxytyrosol doubles the amount of vitamin C in plasma. Vitamin E or al pha-tocopherol inhibits the activity of protein kinase C (PKC) and PKC-mediated pathwa ys. Alpha-tocopherol also modulates the expression of various genes, plays a key role i n neurological function, inhibits platelet aggregation and enhances vasodilation.

* Nicotine is a chiral alkaloid. The primary therapeutic use of nicotine is treating nicotine dependence to eliminate smoking and the damage it does to health. Controlled levels of nicotine are given to patients through gums, dermal patches, lozenges, inhalers, or nas al sprays to wean them off their dependence. A 2018 Cochrane Collaboration review fou nd high quality evidence that all current forms of nicotine replacement therapy (gum, pat ch, lozenges, inhaler, and nasal spray) therapies increase the chances of successfully q uitting smoking by 50–60%, regardless of setting. Nicotine is highly addictive, addiction involves drug-reinforced behavior, compulsive use, and relapse following abstinence. Nicotine dependence involves tolerance, sensitization, physical dependence, and psychological dependence. Nicotine dependence causes distress. Nicotine withdrawal symptoms include depressed mood, stress, anxiety, irritability, difficulty concentrating, and sleep disturbances. Nicotine acts as a receptor agonist at most nicotinic acetylcholine receptors (nAChRs), except at two nicotinic receptor subunits (nAChRalpha9 and nAChRalpha10) where it acts as a receptor antagonist. A 2015 review noted that stimulation of the alpha4beta2 nicotinic receptor is responsible for certain improvements in attentional performance . Alpha4beta2 is also the biological target that mediates nicotine's addictive properties. Nicotine has potential beneficial effects, but it also has paradoxical effects, which may be due to the inverted U-shape of the dose-response curve or pharmacokinetic features. Randomized trials and observational studies of nicotine replacement therapy in cardiovascular patients show no increase in adverse cardiovascular events compared to those treated with placebo. Using nicotine products during cancer treatment is counterrecommended, as nicotine promotes tumour growth, but temporary use of NRTs to quit smoking may be advised for harm reduction. Nicotine potential interacts with sympathomimetic drugs (adrenergic agonists) and sympatholytic drugs (alpha-blockers and beta-blockers). Nicotine and cigarette smoke both induce the expression of liver enzymes (e.g., certain cytochrome P450 proteins) which metabolize drugs, leading to the potential for alterations in drug metabolism. Smoking cessation may decrease the metabolism of acetaminophen, beta-blockers, caffeine, oxazepam, pentazocine, propoxyphene, theophylline, and tricyclic antidepressants, leading to higher plasma concentrations of these drugs.

* PR1P peptide (DRVQRQTTTVVA) is derived from an extracellular VEGF-binding domain of the pro-angiogenic glycoprotein prominin-1. The Prominin-1-Derived peptide

improves cardiac function following ischemia making PR1P a potential non-invasive candidate therapeutic for Myocardial Infarction. PR1P is able to increase the activity of vascular endothelial growth factor (VEGF) in cells lining the inside of blood vessels, can reduce lung cell death and tissue damage in a mouse model of emphysema. To investigate its therapeutic potential in emphysema, the researchers treated human lung cells cultured in a lab dish and mouse models of the disease with the PR1P peptide. In both cases, PR1P increased VEGF signaling and prevented the protein from being destroyed. The team also discovered that in mice, inhalation of the peptide was sufficient to increase the levels of VEGF found in the lungs within 30 minutes. Moreover, 24 hours later, the levels of VEGF in these animals remained two-times higher compared to those seen in vehicle-treated (control) mice. Additionally, PR1P also lowered lung cell death — one of the hallmarks of emphysema — both in lab-cultured cells and in cells in the animals' lungs. Finally, the researchers showed that PR1P was able to reduce lung injury in mice with emphysema that were followed for up to 21 days without triggering any undesirable side effects. "Taken together, these results highlight the potential of PR1P as a novel therapeutic agent for the treatment of emphysema or other lung diseases characterized by VEGF signaling dysregulation," they wrote. These other diseases include, for instance, acute respiratory distress syndrome (ARDS), a common and severe lung disease in which the team is already testing PR1P. PR1P also ameliorates neurodegeneration through activation of VEGF signaling pathway and remodeling of the extracellular environment in optic neuropathies. Optic neuropathies are the most commonly occurring neurodegenerative diseases, characterized by progressive retinal ganglion cell (RGC) degeneration. PR1P prevented RGC apoptosis resulting in improvement of retinal function in the rat ONC (optic nerve crush) model. PR1P treatment significantly increased phosphorylation of ERK and AKT and expression its downstream proteins c-fos and Egr-1 in the retina. Additionally, PR1P beneficially increased the MMP-9/TIMP-1 ratio and promoted glial activation in the retina of ONC rats.

* Pracinostat is an orally bioavailable, small-molecule histone deacetylase (HDAC) inhibitor based on hydroxamic acid with potential anti-tumor activity characterized by favorable physicochemical, pharmaceutical, and pharmacokinetic properties. Pracinostat selectively inhibits HDAC class I, II, IV without class III and HDAC6 in class IIb, but has no effect on other Zn-binding enzymes, receptors, and ion channels. It accumulates in tumor cells and exerts a continuous inhibition to histone deacetylase, resulting in acetylated histones accumulation, chromatin remodeling, tumor suppressor genes transcription, and ultimately, apoptosis of tumor cells. In March 2014, pracinostat was granted the status of Orphan Drug for acute myelocytic leukemia (AML) and for the treatment of T-cell lymphoma by the Food and Drug Administration. Claims exist about its use in hematological tumors, breast cancer, colon cancer, prostate cancer, pancreas cancer, leukemia, lymphoma, ovary cancer, melanoma and neuroblastoma.

* Pralnacasan is a potent, non-peptide inhibitor of interleukin-1beta converting enzyme (ICE, aka Caspase-1). Pralnacasan has also been investigated for the treatment of Partial Epilepsy; advancing to Phase II clinical trials. Pralnacasan is an oral, anti-cytokine drug candidate. Pralnacasan inhibits interleukin-1beta converting enzyme

(ICE), an enzyme that regulates the production of IL-1 and IFN gamma – intercellular mediators that initiate and sustain the process of inflammation. Inhibiting ICE may be an effective strategy for curtailing damaging inflammatory processes common to a number of acute and chronic conditions, such as rheumatoid arthritis (RA) and osteoarthritis.

* PYY peptide-long. Peptide YY (97 aa) also known as peptide tyrosine tyrosine is a peptide that in humans is encoded by the PYY gene. PYY is found in L cells in the mucosa of gastrointestinal tract, especially in ileum and colon. Also, a small amount of PYY, about 1-10%, is found in the esophagus, stomach, duodenum and jejunum. PYY concentration in the circulation increases postprandially (after food ingestion) and decreases by fasting. In addition, PYY is produced by a discrete population of neurons in the brainstem, specifically localized to the gigantocellular reticular nucleus of the medulla oblongata. PYY exerts its action through NPY receptors; it inhibits gastric motility and increases water and electrolyte absorption in the colon. PYY may also suppress pancreatic secretion. It is secreted by the neuroendocrine cells in the ileum and colon in response to a meal, and has been shown to reduce appetite. PYY works by slowing the gastric emptying; hence, it increases efficiency of digestion and nutrient absorption after a meal. Research has also indicated.

* Runcaciguat (BAY 1101042) is an orally active stimulator of soluble guanylate cyclase, and is used in the research of cardiovascular and renal diseases combined with selective partial adenosine A1 receptor agonists. Given the broad impact of oxidative stress in cardiovascular and cardiorenal diseases, runcaciguat might become a new treatment modality for a broad variety of diseases in these indication space but also beyond. After a successful completion of phase 1 clinical studies, runcaciguat is currently investigated in a clinical phase 2 study for the treatment of patients with chronic kidney disease (CKD) and nonproliferative diabetic retinopathy (NPDR.)

* SW-033291 is a small-molecule inhibitor targeting 15-hydroxyprostaglandin dehydrogenase (15-PDGH) and subsequently elevating the production of prostaglandin E2 (PGE2), has been proved to accelerate the recovery and potentiate the regeneration of multiple tissues including the bone, liver, and colon. SW033291 stimulates tissue regeneration, catalyzing faster regrowth and healing of damaged tissues. SW033291 acts like a vitamin for tissue stem cells, stimulating their ability to repair tissues more quickly. SW033291 heals damage in multiple tissues, which suggests that it may have applications in treating many diseases.

* Tafamidis is a pharmacological chaperone that stabilizes the correctly folded tetrameric form of the transthyretin (TTR) protein by binding in one of the two thyroxine-binding sites of the tetramer. It is a medication used to delay disease progression in adults with certain forms of transthyretin amyloidosis (ATTR). It can be used to treat both hereditary forms (hATTR), familial amyloid cardiomyopathy (FAC) and familial amyloid polyneuropathy (FAP), as well as wild-type transthyretin amyloidosis (wtATTR, formerly called senile systemic amyloidosis). It works by stabilizing the protein transthyretin. In people with ATTR these strands separate and form clumps that harm tissues including nerves and the heart. In people with FAP, the individual monomers fall

away from the tetramer, misfold, and aggregate; the aggregates harm nerves.

* Tenapanor-A250. Tenapanor, used in form of tenapanor hydrochloride, is a treatment for adults with a disease of the gut called irritable bowel syndrome with constipation commonly referred to as IBS-C. Tenapanor acts as an inhibitor of the sodium-proton exchanger NHE3. This antiporter protein is found in the kidney and intestines, and normally acts to regulate the levels of sodium absorbed and secreted by the body. When administered orally, tenapanor selectively inhibits sodium uptake in the intestines, limiting the amount absorbed from food, and thereby reduces levels of sodium in the body. This may make it useful in the treatment of chronic kidney disease and hypertension, both of which are exacerbated by excess sodium in the diet. Studies in mice demonstrated DRA inhibitor A250 a 4,8-dimethylcoumarin compound' efficacy in a loperamide model of constipation, and provided novel data that clarified the mechanisms of intestinal fluid absorption. A250 greatly reduces urine sediment in oxalate nephropathy model and prevents renal damage in the same model. Inhibition of SLC26A3 by DRA inhibitor A250 provides a novel anti- absorptive therapy for constipation. It is believed that inhibition of SLC26A3, alone or together with drugs acting on alternative anti-absorptive or pro-secretory mechanisms, could be highly effective in treating refractory constipation. Inhibition of SLC26A3 reduced manifestations of constipation with comparable efficiency to a blocker of intestinal Na+ absorption, the NHE3 inhibitor tenapanor, and when co-administered SLC26A3 and NHE3 inhibitors fully reversed constipation. Theoretically, SLC26A3 inhibition could be more effective than NHE3 inhibition for constipation therapy as it blocks absorption in the distal colon where stool is dehydrated to its final form. It is surprisingly found that additive or synergistic actions of NHE3 and SLC26A3 inhibitors in preventing loperamide-induced constipation. The ability of small molecule inhibitors of NHE3 (tenapanor) and SLC26A3 (the 4,8-dimethylcoumarin drug "DRAinh-A250") to reduce intestinal fluid absorption makes them valuable therapies for irritable bowel syndrome with constipation and for relief of constipation in cystic fibrosis.

* Terevalefim is a small molecule which mimics the activity of hepatocyte growth factor (HGF). Through its actions, it activates the c-Met cascade, exhibits c-Met dependence and c-Met receptor activation. As it is able to activate repair pathways, it has been tested in clinical trials for acute kidney injury and in delayed graft function. Recent studies suggest that hepatocyte growth factor (HGF), a pleiotropic cytokine, has multiple activities including promoting elastin synthesis, anti-apoptosis, suppressing inflammation, inducing angiogenesis and proliferation of lung epithelial and endothelial cells, and ultimately, lung regeneration. HGF production in pulmonary fibroblasts of emphysema patients is impaired. Terevalefim has the potential to stimulate regenerative processes in the lung and thus reverse established emphysema. In hepatic fibrosis Terevalefim opposes the hepatic fibrogenic gene program. In preclinical models of liver fibrosis, Terevalefim is therapeutic, attenuating profibrotic gene and protein expression, accelerating collagen catabolism, and improving hepatic function. Terevalefim has oral bioavailability and oral efficacy, and data from pharmacokinetic/acute safety studies indicate that it is safe and has properties consistent with a drug-like compound.Terevalefim has the orphan drug status for renal failure. It is an anti-

ischaemic, antifibrotic, used in heart failure, urologic and vascular disorders. Highest development phases, Phase III for Delayed graft function. Phase II for Acute kidney injury, Acute lung injury, Renal failure. Preclinical for Brain injuries. No development reported for Heart failure. Discontinued for Hepatic fibrosis, Myocardial infarction, Stroke.

* Tetrachlorodecaoxide (TCDO) is a chlorite-containing, immunomodulatory, macrophage-activating drug. Tetrachlorodecaoxide is used in the management of radiation cystitis, is effective in the treatment of diabetic foot ulcers, and is used in wound healing, where the mechanism of action is activation of the macrophage system, and increasing the partial pressure of oxygen in the wound. There is anecdotal evidence that tetrachloro decaoxide (TCDO) was of benefit in the treatment of varicella zoster. Direct application of TCDO has been used in the management of conditions such as impetigo contagiosa, decubital ulcer, chronic leg ulcer, ulcers in wounds, burns, super infected skin disease and semi-malignant skin tumour.

* Tezacaftor, also known as VX-661, is CFTR modulator. VX-661 is potentially useful for treatment of cystic fibrosis disease. Cystic fibrosis (CF) is a genetic disease caused by defects in the CF transmembrane regulator (CFTR) gene, which encodes an epithelial chloride channel. The most common mutation, delta508CFTR, produces a protein that is misfolded and does not reach the cell membrane. VX-661 can correct trafficking of delta508CFTR and partially restore chloride channel activity. VX-661 is currently under Phase III clinical trial. VX-661 is a cystic fibrosis transmembrane conductance regulator modulator. VX-661 is currently under investigation for the treatment of cystic fibrosis. VX-661 has also shown promise in treating sarcoglycanopathies, Brody's disease, cathecolaminergic polymorphic ventricular tachycardia, limb girdle muscular dystrophy, asthma, smoke induced chronic obstructive pulmonary disorder, chronic bronchitis, rhinosinusitis, constipation, pancreatitis, pancreatic insufficiency, male infertility caused by congenital bilateral absence of the vas deferens (CBAVD), mild pulmonary disease, idiopathic pancreatitis, allergic bronchopulmonary aspergillosis (ABPA), liver disease, hereditary emphysema, hereditary hemochromatosis, coagulation-fibrinolysis deficiencies, such as protein C deficiency, type 1 hereditary angioedema, lipid processing deficiencies, such as familial hypercholesterolemia, type 1 chylomicronemia, abetalipoproteinemia, lysosomal storage diseases, such as I-cell disease/pseudo-Hurler, mucopolysaccharidoses, Sandhof/Tay-Sachs, Crigler-Najjar type II, polyendocrinopathy/hyperinsulinemia, diabetes mellitus, Laron dwarfism, myeloperoxidase deficiency, primary hypoparathyroidism, melanoma, glycanosis CDG type 1, congenital hyperthyroidism, osteogenesis imperfecta, hereditary hypofibrinogenemia, ACT deficiency, diabetes insipidus (DI), neurohypophyseal DI, nephrogenic DI, Charcot-Marie tooth syndrome, Pelizaeus-Merzbacher disease, neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, progressive supranuclear palsy, Pick's disease, polyglutamine neurological disorders such as Huntington's, spinocerebellar ataxia type I, spinal and bulbar muscular atrophy, dentatombral pallidoluysian, and myotonic dystrophy, as well as spongifiorm encephalopathies, such as hereditary Creutzfeldt-Jakob disease (due to prion protein processing defect), Fabry disease, Gerstrnarm-

Straussler-Scheinker syndrome, chronic obstructive pulmonary disorder, dry-eye disease, or Sjogren's disease, osteoporosis, osteopenia, bone healing and bone growth (including bone repair, bone regeneration, reducing bone resorption and increasing bone deposition), Gorham's Syndrome, chloride channelopathies such as myotonia congenita (Thomson and Becker forms), Bartter's Syndrome type III, Dent's disease, hyperekplexia, epilepsy, lysosomal storage disease, Angelman syndrome, and primary ciliary dyskinesia (PCD), a term for inherited disorders of the structure and/or function of cilia, including PCD with situs inversus (also known as Kartagener syndrome), PCD without situs inversus, and ciliary aplasia.

* Tolimidone (CP-26154; MLR-1023) is a compound which was found to stimulate secretion of gastric mucosa. Tolimidone is also a novel, clinical stage drug candidate for the treatment of Type 2 Diabetes and Nonalcoholic Steatohepatis (NASH). Tolimidone improves glycemic control by selectively activating the enzyme lyn kinase, which has been shown to modulate the insulin-signaling pathway. Tolimidone is the first described specific and direct activator of Lyn kinase that elicits glycemic control activity through potentiation of insulin activity. Lyn kinase is an enzyme that modulates insulin sensitivity and dyslipidemia. Lyn kinase may also play a role in promoting liver regeneration and hepatocyte preservation. Tolimidone does not activate the PPAR pathway. Tolimidone has demonstrated improvement in multiple components of NASH in a comprehensive pre-clinical model of NASH: Reduction in NAS score, Decrease in liver weight, Reduction in adiposity, Decrease in insulin resistance. Adhera is developing MLR-1023 (tolimidone) as a new drug for Type I diabetes with a focus on C-peptide positive patients.

* Tropisetron hydrochloride is a serotonin 5-HT3 receptor antagonist used mainly as an antiemetic to treat nausea and vomiting following chemotherapy, although it has been used experimentally as an analgesic in cases of fibromyalgia. The drug has also been approved for the prophylaxis and treatment of post-operative nausea and vomiting. 5-HT3 receptors are excitatory ligand-gated cation channel receptors that can be found in the presynaptic vagal afferents, the area postrema and the gastrointestinal tract. Stimulation of these receptors seems to be important in the emetic response and the gag reflex. It has also been shown that tropisetron shows agonistic effects on the 7 nicotinic acetylcholine receptor. This receptor is associated with auditory sensory gating, a neural mechanism believed to have important roles in information processing and cognition, both diminished in people with schizophrenia. Tropisetron acts as both a selective 5-HT3 receptor antagonist and alpha7-nicotinic receptor agonist. Tropisetron is a well-tolerated drug with few side effects. Headache, constipation, and dizziness are the most commonly reported side effects associated with its use. Hypotension, transient liver enzyme elevation, immune hypersensitivity syndromes and extrapyramidal side effects have also been associated with its use on at least one occasion.There have been no significant drug interactions reported with this drug's use. It is broken down by the hepatic cytochrome P450 system and it has little effect on the metabolism of other drugs broken down by this system. Tropisetron improved the treatment of tendinopathies considerably, with the effect being comparable to the topical application of local anaesthetics combined with depot corticosteroids. Tropisetron as a treatment for

trigger points in myofascial pain syndrome also brought about rapid and prolonged relief in the majority of cases. The analgesic effect was far superior to the action of local anaesthetics. 5-HT3 receptor antagonists from various sources have been published for a wide variety of uses, for example for the treatment of visceral pain, migraine, vascular and cluster headache, trigeminal neuralgia, arrhythmia, serotonin-induced gastro-intestinal disorders, including emesis induced by anti-cancer agents, anxiety, stress-related psychiatric disorders, depression, cognitive disorders, social withdrawal, panic attacks, agoraphobia, lung embolism, rhinitis or serotonin-induced nasal disorders, fibromyalgia and local treatment of pain caused by various non-inflammatory or inflammatory conditions. Furthermore, 5-HT3 receptor antagonists are useful for the treatment of diseases caused or influenced by activation of thrombocytes. Thrombocytes play a central role in blood coagulation (clotting) and are therefore of high importance in the pathogenesis of cardiac infarction and stroke, also in thrombosis of the veins and inflammatory conditions in the development of atherosclerosis.

* VPS35 Factor or vacuolar protein sorting ortholog 35 is a protein involved in autophagy and is implicated in neurodegenerative diseases, such as Parkinson's Disease (PD) and Alzheimer's Disease (AD). There are numerous pathways affected by altered VPS35 levels and activity, which have clinical significance in neurodegeneration. VPS35 levels peak at postnatal days 10-15 and then decline to a low, stable level throughout adulthood. Various mechanisms in PD are thought to contribute to the generation of reactive oxygen species ROS, including the metabolism of dopamine, calcium homeostasis imbalances, dysfunction in PD-causing gene products (e.g. DJ-1, PINK1, parkin or alpha-synuclein), aging as well as mitochondrial dysfunctions. VPS35 represents an important regulator of crucial pathways involved in PD pathogenesis controlling the accumulation and clearance of alpha-syn, mitochondrial dynamics and synaptic functions. VPS35 can clear tau proteins, a hallmark of Alzheimer’s disease, in the brain. In progressive supra-nuclear palsy PSP and Picks’ disease, tau is the only protein to form deposits in the brain, unlike Alzheimer’s disease, where both tau and beta-amyloid accumulate.

* WAY-315193 is a norepinephrine reuptake inhibitor, used for multiple indications including major depressive disorder, attention deficit hyperactivity disorder, chronic fatigue syndrome, nervous system disorders, sexual dysfunction, gastrointestinal and genitourinary disorders, stress urinary incontinence, gynecological disorders, vasomotor symptoms, and pain disorders such as diabetic neuropathy and fibromyalgia.

1.3.1.41 RT-MB-53

https://archive.org/details/Resonant_Therapy-Molecular_Biology_53

Baicalein; Biapenem; BRL-44408; Cenicriviroc; Compound-4210; Cotadutide; ERDRP-0519; GKT-137831; IAP Factor-C188-9; Lanifibranor; Liver Dysfunction Mix; LX-9211; Masitinib; ML-290; Nadide; Natrocitral; Oolonghomobisflavan-A; Pepinemab; PF-00446687; Phenylmethimazole; Ponsegromab; PRI-724; PX-20606; Resmetirom; RG-7834; Solithromycin; Terlipressin; Tezepelumab; Verdiperstat

* Baicalein (5,6,7-trihydroxyflavone) is a flavone, a type of flavonoid. Baicalein shows an xiolytic effects in mice without incidence of sedation or myorelaxation. Baicalein is also an antagonist of the estrogen receptor, or an antiestrogen. Studies in cytokine signaling have uncovered the critical role of human TSLP (hTSLP) in allergic responses. Recentlt y, Baicalein was found to be the first small molecule to block TSLP signaling pathways. The flavonoid has been shown to inhibit certain types of lipoxygenases and act as an an ti-inflammatory agent. It has antiproliferative effects on ET-1-induced proliferation of pul monary artery smooth muscle cell proliferation via inhibition of TRPC1 channel expressi on. Possible antidepressant effects have also been attributed to baicalein in animal rese arch. Baicalein is an inhibitor of CYP2C9, an enzyme of the cytochrome P450 system th at metabolizes drugs in the body. Baicalein has been shown to inhibit Staphylococcus a ureus biofilm formation and the quorum sensing system in vitro. It has also been shown to be effective in vitro against all forms of Borrelia burgdorferi and Borrelia garinii. Baical ein has a role as an antioxidant, a hormone antagonist, a prostaglandin antagonist, an EC 1.13.11.31 (arachidonate 12-lipoxygenase) inhibitor, an EC 1.13.11.33 (arachidonate 15-lipoxygenase) inhibitor, a radical scavenger, an EC 3.4.21.26 (prolyl oligopeptidase) i nhibitor, an anti-inflammatory agent, a plant metabolite, a ferroptosis inhibitor, an anticor onaviral agent, an EC 3.4.22.69 (SARS coronavirus main proteinase) inhibitor, an angio genesis inhibitor, an antineoplastic agent, an EC 4.1.1.17 (ornithine decarboxylase) inhi bitor, an antibacterial agent, an antifungal agent and an apoptosis inducer.

* Biapenem is a carbapenem antibiotic. Carbapenems are a class of highly effective anti biotic agents commonly used for the treatment of severe or high-risk bacterial infections. This class of antibiotics is usually reserved for known or suspected multidrug-resistant (MDR) bacterial infections. Similar to penicillins and cephalosporins, carbapenems are members of the beta lactam class of antibiotics, which kill bacteria by binding to penicilli n-binding proteins, thus inhibiting bacterial cell wall synthesis. However, these agents in dividually exhibit a broader spectrum of activity compared to most cephalosporins and p enicillins. Furthermore, carbapenems are typically unaffected by emerging antibiotic resi stance, even to other beta-lactams. It has in vitro activity against anaerobes. Biapenem is a 1-beta-methylcarbapenem antibiotic with a wide range of antibacterial activity. Biape nem has similar antibacterial activity to that of imipenem, but is more stable against hum an renal dehydropeptidase-I and with less neurotoxicity.. Biapenem had activity compar able to those of imipenem and meropenem against all groups of anaerobes with MICs f or 90% of the strains tested of 0.06 to 2 micrograms/ml. Against the Bacteroides fragilis group, biapenem was more active than ampicillin-sulbactam, ticarcillin-clavulanate, pipe racillin, cefoxitin, cefotaxime, and ceftriaxone. Biapenem was also active against all of th e B. capillosus, Prevotella, Clostridium, and Eubacterium strains and anaerobic cocci te sted. Against all of the anaerobes tested, biapenem was 32- and 4-fold more active than clindamycin and metronidazole, respectively. These data indicate broad-spectrum activit y by biapenem against anaerobes.

* BRL-44408 is an adrenergic alpha-antagonist. Adrenergic alpha-antagonists are used i

n the treatment of hypertension, vasospasm, peripheral vascular disease, shock, and ph eochromocytoma. In experimental cholestatic cirrhosis, short-term therapy with the alph a2 antagonist BRL44408 significantly decreased portal pressure and did not alter syste mic haemodynamics even without beta-blocking agents cotherapy.

* Cenicriviroc. The C-C chemokine receptor (CCR) 5 is an important contributor in fibros is progression and hepatic stellate cells HSC-Kuppfer cell interaction, which makes it po ssible for cenicriviroc, an antagonist of CCR2/CCR5, to be a potential antifibrotic agent. The inhibitor of CCR5 is predicted to inhibit HSCs from activation, proliferation, and migr ation. has dramatic positive effects on anti-inflammation and antifibrosis in animal fibrosi s models. Furthermore, the antifibrotic effect of cenicriviroc was demonstrated in a phas e 2 clinical trial and in a phase 2b trial containing 289 NASH patients with significantly i mproved liver fibrosis but no worsening steatohepatitis (20%) when compared with plac ebo group (10%) after 1 year of cenicriviroc therapy.

* Compound 4210 (also 2,7-Diaminomitosene, or 2,7-DAM) is a synthetic molecule with therapeutic use for treating viral infections, especially encephalitic alphavirus infections. 2,7-Diaminomitosene, the major metabolite of the antitumor antibiotic mitomycin C, form s DNA adducts in tumor cells and, it is non-cytotoxic. The compound 4210 showed antiv iral efficacy by up regulation of type 1 interferon (IFN) specifically IFN-beta. The compou nd 4210 was designed and synthesized by a structure-based approach targeting the intr acellular adaptor protein, myeloid differentiation primary response protein 88 (MyD88). Besides having an antiviral effect, the compound 4210 also demonstrated therapeutic ef ficacy for treating inflammatory syndrome associated with Gram positive bacterial infecti ons such as exposure to staphylococcal enterotoxin B (SEB) induced toxic shock syndr ome (TSS) in mice and can potentially be used in clinical set up for treating sepsis and s eptic shock. In addition, the application of molecule 4210 can treat sepsis and septic sh ock triggered by exposure to other biological agents such as Francisella tularensis or Bu rkholderia mallei known to cause tularemia and glanders, respectively. The molecule 42 10 has the potential for a broad-spectrum therapeutic use.

* Cotadutide (MEDI0382), a dual GLP-1 and glucagon receptor GCGR agonist, has bee n reported to exert multifactorial reductions in NAFLD activity score, pro-peptide of type III collagen level, fibrosis-4 index to an extent more pronounced than the GLP-1 mono a gonist Liraglutide.

* ERDRP-0519 is an antiviral drug which is the first drug specifically developed to target the measles morbillivirus. It acts as an inhibitor of the viral enzyme RNA polymerase whi ch is essential for viral replication, and in animal studies showed good oral bioavailabilit y and protected ferrets from otherwise lethal doses of a morbillivirus when administered up to three days after infection.

* GKT-137831, a dual inhibitor of NADPH oxidase (NOX) 1/4, can inhibit both NOX 1 an d NOX 4 to reduce reactive oxidative species (ROS) effect in hepatic stellate cells HSCs. GKT137831 showed significant improvement of liver fibrosis in mice induced by carbon tetrachloride (CCL4) and duct ligation. What is more, in an ongoing clinical trial to asses

s safety and efficacy of GKT137831 in patients with primary biliary cholangitis, GKT137 831 significantly improved serological cholestasis parameters and other relevant results (such as serum enzymes levels and liver fibrosis).

* IAP Factor-C188-9. Alkaline phosphatase intestinal also known as IAP is a type of alka line phosphatase that in humans is encoded by the IAP gene. Endogenous IAP is decre ased during liver fibrosis, perhaps contributing to the gut barrier dysfunction and worsen ing fibrosis. Oral IAP protects the gut barrier and further prevents the development of liv er fibrosis via a TLR4-mediated mechanism. (doi:10.7150/thno.48468). C188-9 is a sm all molecule which showed antitumor activity in vitro in three hepatocellular carcinoma c ell lines. In mice with hepatocyte-specific deletion of Pten (HepPten- mice), C188-9 treat ment blocked hepatocellular carcinoma tumor growth, reduced tumor development, and reduced liver steatosis, inflammation, and bile ductular reactions, resulting in improvem ent of the pathological lesions of NASH. Remarkably, C188-9 also greatly reduced liver i njury in these mice as measured by serum aspartate transaminase and alanine transam inase levels. Analysis of gene expression showed that C188-9 treatment of HepPten- mi ce resulted in inhibition of signaling pathways downstream of STAT3, STAT1, TREM-1, a nd Toll-like receptors. In contrast, C188-9 treatment increased liver specification and diff erentiation gene pathways. (DOI: 10.1158/1078-0432.CCR-16-2253) Elevated liver enzy mes often indicate inflammation or damage to cells in the liver. Inflamed or injured liver cells leak higher than normal amounts of certain chemicals, including liver enzymes, int o the bloodstream, elevating liver enzymes on blood tests. The recording inhibits the pro duction of both alanine transaminase (ALT) and aspartate transaminase (AST).

* Lanifibranor is a pan-PPAR receptor agonist, meaning that it works by increasing the e ffects of all three PPAR receptors. It is hoped that by acting on all PPAR receptor subtyp es, Lanifibrinor will be more effective in reducing fibrosis than PPAR receptors that only act on one receptor subtype. Lanifibranor received orphan designation for the treatment of scleroderma from both the U.S. Food and Drug Administration (FDA) and the Europe an Medicines Agency (EMA). Lanafibranor is also undergoing a Phase 2b clinical trial in vestigating its efficacy in patients with non-alcoholic steatohepatitis (NASH) with compe nsated cirrhosis. NASH with compensated cirrhosis represents a serious stage of the di sease and is becoming the leading cause for liver transplantation, which today represen ts the only available treatment option for patients who have progressed to end-stage NA SH. Given the broad range of activity of lanifibranor as a pan-PPAR agonist on multiple f eatures of NASH, including beneficial effects on metabolism, inflammation, ballooning, fi brosis and vascular manifestations.

* Liver Dysfunction Mix adressess portal hypertension, enlarged liver, fatty liver (hepatic steatosis), liver cirrhosis, liver inflammation, hepatic fibrosis. hepatocellular injury, gastro intestinal motility, excess urination, liver enzyme levels (ALT, ASP, ALP), non-alcoholic fa tty liver (NAFL), non-alcoholic steatohepatitis (NASH) and, alcoholic liver disease (ALP). Each pair plays for 5m. In order,

Right Channel Left Channel

-PX-20606
-BRL-44408
-Lanifibranor
-Cenicriviroc
-Resmetirom
-Phenylmethimazole
-Cotadutide
-Tolimidone
-C188-9
-Emricasan
-Tempol
-GKT-137831
-Solithromycin
-PRI-724
-ML-290
-Prucalopride
-Terlipressin
-IAP Factor

* LX-9211 is a potent, orally delivered, selective small molecule inhibitor of AAK1. Preclinical studies of LX9211 demonstrated central nervous system penetration and reduction in pain behavior in models of neuropathic pain without affecting opiate pathways. LX9211 has received Fast Track designation from the U.S. Food and Drug Administration for the development in diabetic peripheral neuropathic pain.

* Masitinib is a tyrosine-kinase inhibitor used in the treatment of mast cell tumours in animals, specifically dogs. Since its introduction in November 2008 it has been distributed under the commercial name Masivet. It has been available in Europe since the second part of 2009. Masitinib has been studied for several human conditions including melanoma, multiple myeloma, gastrointestinal cancer, pancreatic cancer, Alzheimer disease, multiple sclerosis, rheumatoid arthritis, mastocytosis, amyotrophic lateral sclerosis and COVID-19. Masitinib is a tyrosine kinase inhibitor which inhibits tyrosine kinases, enzymes responsible for the activation of many proteins by signal transduction cascades. Specifically, masitinib targets the receptor tyrosine kinase c-Kit which is found to be overexpressed or mutated in several types of cancer. Masitinib has also additional targets, it also inhibits the platelet derived growth factor receptor (PDGFR), lymphocyte-specific protein tyrosine kinase (Lck), focal adhesion kinase (FAK) and fibroblast growth factor receptor 3 (FGFR3) as well as CSF1R. Masitinib has been shown to block the replication of SARS-CoV-2 by inhibiting its main protease, 3CLpro. Masitinib showed >200-fold reduction in viral titers in the lungs and nose of mice infected with SARS-CoV-2.

* ML-290 is a small molecule agonist of the human relaxin receptor, relaxin family peptide receptor 1 (RXFP1). ML290 targets the expression of fibrosis-related genes in primary human stellate cells. RNA sequencing analysis of TGF-b1–activated LX-2 cells showed that ML290 treatment primarily affected extracellular matrix remodeling and cytokine signaling, with expression profiles indicating an antifibrotic effect of ML290. ML290 treatment in human liver organoids with LPS-induced fibrotic phenotype resulted in a significant reduction of type-I collagen. The pharmacokinetics of ML290 in mice demonstrated its high stability in vivo, as evidenced by the sustained concentrations of compound in the liver. In mice expressing human RXFP1 gene treated with carbon tetrachloride, ML290 significantly reduced collagen content, a-smooth muscle actin expression, and cell proliferation around portal ducts. In conclusion, ML290 demonstrated antifibrotic effects in liver fibrosis. Chronic liver fibrosis plays a crucial role in the progression of most liver diseases, including chemical intoxication, viral infection, alcoholic liver disease, and nonalcoholic steatohepatitis. Liver fibrosis is accompanied

by changes in the extracellular matrix (ECM) with abnormal deposition of collagen, leading to the formation of permanent fibrous scar, inflammation,and subsequent degeneration of the liver tissue struc-ture. When liver fibrosis progresses unchecked, it often leads to organ failure or cancer.

* Nadide (Nicotinamide adenine dinucleotide, also NAD+) is a dinucleotide of adenine and nicotinamide. It has coenzyme activity in redox reactions and also acts as a donor of ADP-ribose moieties. During aging, NAD+ levels decline, and many enzymes associated with NAD+ degradation and biosynthesis are altered. Many of the cellular processes that influence or are influenced by aging — such as metabolic dysfunction, DNA repair failure, genomic instability, inflammation, cellular senescence, and neurodegeneration — are regulated by NAD+ levels. Also, this decline in NAD+ levels during aging has been linked to the development and progression of aging-related diseases, including atherosclerosis, arthritis, hypertension, cognitive decline, diabetes, and cancer. NAD+ decline at the core of hallmarks of aging. The age-dependent decline in NAD+ levels contribute to many hallmarks of aging. This includes DNA damage, epigenetic alteration, deregulated nutrient-sensing, loss of proteostasis, altered cellular communication, cellular senescence, stem cell exhaustion, mitochondrial dysfunction, compromised autophagy, and possibly telomere attrition.

* Natrocitral and water. From the medical point of view trisodium citrate is used as alkalinizing agent. It works by neutralizing excess acid in the blood and urine. It has been indicated for the treatment of metabolic acidosis. Natrocitral is an ingredient used for the anticoagulation of whole blood as part of automated apheresis procedures. Used as an anticoagulant during plasmophoresis as well as a neutralizing agent in the treatment of upset stomach and acidic urine. Natrocitral is also used to associated treatment for these conditions: Acidosis, Allergic cough, Allergies, Asthma, Asthma Chronic, Cough, Common Cold, Cough, Coughing caused by Bronchitis, Dehydration, Gouty Arthritis, Heartburn, Metabolic Acidosis, Phlegm, Airway secretion clearance therapy, Oral rehydration therapy, Plasmapheresis, Urine alkalinization therapy, Fluid and electrolyte maintenance therapy, Irrigation during surgical procedures, Irrigation of the ocular surface therapy. Upon absorption, trisodium citrate dissociates into sodium cations and citrate anions; organic citrate ions are metabolized to bicarbonate ions, resulting in an increase in the plasma bicarbonate concentration, the buffering of excess hydrogen ion, the raising of blood pH, and potentially the reversal of acidosis. In addition, increases in free sodium load due to trisodium citrate administration may increase intravascular blood volume, facilitating the excretion of bicarbonate compounds and an anti-urolithic effect.

* Oolonghomobisflavan-A Long-term molecular dynamics simulations revealed Oolonghomobisflavan-A (Tea bioactive molecule) as a potential lead molecule compared to repurposed drugs (Atazanavir, Darunavir, and Lopinavir) against the Main protease of SARS-CoV-2. Oolonghomobisflavan-A has been shown to inhibit the growth of the human immunodeficiency virus (HIV) as well. OFA exhibits antioxidant activity against both lipid peroxidation and oxidative modification of apo B-100 in LDL oxidized by ROS and RNS. Polyphenols in oolong tea may prevent atherosclerosis by reducing

oxidative stress. Oxidation of low-density lipoprotein (LDL) by reactive oxygen species (ROS) and reactive nitrogen species (RNS) has been suggested to be involved in the onset of atherosclerosis. This chemical also possess anticancer and antidiabetic properties.

* Pepinemab is a novel monoclonal antibody that blocks the activity of SEMA4D, and preclinical testing has demonstrated the beneficial effects of anti-SEMA4D treatment in a variety of neurodegenerative disease models. SEMA4D regulates the migration and activation of microglia and astrocytes, brain cells known for their role in promoting inflammation. Their chronic activation is thought to contribute to neurodegeneration. Astrocytes' overactivation also halts the cell's normal function, which includes supporting a balance between energy metabolism and nerve cell activity. Impaired brain metabolism is seen in several neurodegenerative disorders, including Huntington's. SEMA4D also has been shown to halt nerve cell development and repair of the loss of myelin (the protective sheath around nerve cell fibers), promote the death of nerve cells, and disrupt the blood-brain barrier. By blocking SEMA4D, pepinemab was designed to limit inflammation, normalize metabolism, promote myelin repair and prevent blood-brain barrier disruption. Preclinical data in a mouse model of the disease has shown that pepinemab can protect against brain shrinkage, a hallmark of Huntington's disease. The antibody also prevented spatial memory loss and lessened anxiety-like behaviors. The U.S. Food and Drug Administration has granted pepinemab fast track and orphan drug designations for the treatment of Huntington's disease. In addition to its potential in HD, pepinemab holds promise as a treatment for Alzheimer's disease (AD), multiple sclerosis (MS) and amyotrophic lateral sclerosis (ALS).

* PF-00446687 is a drug developed for the treatment of erectile dysfunction, which is a non-peptide agonist selective for the melanocortin receptor subtype MC4. It was found to be active in preliminary human trials, with the 200mg dose being of similar effectiveness to 100mg sildenafil, though lower doses were ineffective. While it is unclear whether PF-00446687 itself will be potent and effective enough to be developed for medical use, it has demonstrated that
selectively targeting the MC4 subtype can produce similar aphrodisiac effects to older non-selective peptide-based melanocortin receptor agonists like melanotan II and bremelanotide, without the side effects caused by action at the other melanocortin receptor subtypes.

* Phenylmethimazole (C10) is a derivative of methimazole with anti-inflammatory properties. It is a novel TLR signaling inhibitor, which could decrease constitutive Wnt5a and TLR3 levels together with cell growth and migration. TLR3 is functional in human pancreatic cancer and melanoma cell lines. C10 is effective at inhibiting human pancreatic cancer and malignant melanoma tumor growth in vivo in nude or severe combined immunodeficient mice and associate this with inhibition of signal transducers and activators of transcription 3 activation. Studies performed both in vitro and in vivo have shown that C10 is able to block the production of multiple cytokines, chemokines, and other proinflammatory molecules involved in the pathogenesis of nflammatory / autoimmune diseases, including diabetes and nonalcoholic fatty liver disease (NAFLD).

Particularly, C10 is effective in reducing the increased secretion of cytokines in animal models of endotoxic shock. These effects are not limited to the endotoxic shock, but might also be applied to any disease characterized by the presence of a “cytokine storm”.

* Ponsegromab is a monoclonal antibody directed against the human growth differentiation factor 15 (GDF15; MIC-1), with potential anti-cachexia activity. Upon administration, ponsegromab targets and binds to GDF15, thereby preventing the binding of GDF15 to its receptor glial-cell-derived neurotrophic factor (GDNF) family receptor alpha-like (GFRAL) and blocking GDF15 / GFRAL-mediated signaling. This may abrogate loss of appetite and uncontrolled weight loss associated with high serum levels of GDF15. GDF15, a stress response cytokine and divergent member of the transforming growth factor beta (TGF-beta) superfamily, plays a key role in the regulation of body weight through central mechanisms. High GDF15 plasma levels, as seen in individuals with advanced cancers, are associated with loss of body mass.

* PRI-724 (alias ICG-001) is an inhibitor of CBP/beta-catenin, which has shown antifibrotic effect through inhibiting expression of alpha-smooth muscle actin (alpha-SMA) and collagen 1. Previous studies reported that PRI-724 attenuated HSC activation and ECM accumulation in CCL4-induced mouse model of liver fibrosis and decreased fibrosis severity in liver fibrosis mouse model induced by hepatitis C virus (HCV). Noticeably, a single-center, open-label phase I trial showed that after the administration of PRI-724 in patients with HCV cirrhosis. Currently, a phase I/IIa clinical trial to assess safety and effectiveness of PRI-724 for patients with liver cirrhosis derived from hepatitis C or B virus is ongoing.

* PX-20606 is a farnesoid X receptor (FXR) non-steroidal agonist. This bile-acid-responsive transcription factor belongs to the nuclear receptor superfamily and is highly expressed in the liver and the small intestine. FXR controls the expression of genes involved in metabolic regulation, inflammation, hepatic fibrosis and vascular homeostasis. In contrast to other steroidal counterparts, PX-20606 evades enterohepatic recirculation. In vascular endothelial cells, FXR activation increased eNOS and thus nitric oxide (NO) content while, in endothelial cells and liver tissue, FXR suppressed the inflammatory response by reducing inducible NOS (iNOS) and COX2 expression. In addition, FXR agonism improved liver injury in experimental cholestatic, toxic and NASH liver disease models. Furthermore, in cirrhotic rats, FXR agonists significantly reduced liver inflammation and fibrosis, which was related to reduced expression of inflammatory and angiogenic cytokines. FXR agonists have been shown to reduce bacterial overgrowth, intestinal inflammation and mucosal injury, which improved the gut barrier and reduced bacterial translocation.

* Resmetirom. Non-alcoholic steatohepatitis (NASH) is characterised by hepatic steatosis, inflammation, hepatocellular injury, and progressive liver fibrosis. Resmetirom (MGL-3196) is a liver-directed, orally active, selective thyroid hormone receptor-beta agonist designed to improve NASH by increasing hepatic fat metabolism and reducing lipotoxicity. Preclinical, toxicology, Phase 1, and Phase 2 clinical data suggest

resmetirom has an attractive, differentiated profile as a potential treatment for non-alcoholic steatohepatitis (NASH), non-alcoholic fatty liver disease (NAFLD) and associated dyslipidemias.

* RG-7834 is a small-molecule compound belonging to the chemical class of the dihydroquinolizinones. This compound was first identified as a potent inhibitor for Hepatitis B Vitrus surface antigen secretion, and PAPD5 and PAPD7 were subsequently shown to be its cellular targets. Further studies revealed that small-molecule inhibition of PAPD5 and PAPD7 also reduce Hepatitis A Vitrus infection in human hepatocyte cells and human liver organoids. RG7834 inhibits both HAV and HBV. (https://doi.org/10.1016/j.celrep.2021.108859)

* Solithromycin, a strongly effective macrolide antibiotic, has shown in a phase 2 open-label trial that NAS (average reduction, 1.3) and alanine aminotransferase (ALT) serum level (average reduction, 17.8 U/L) was diminished after treatment with solithromycin for 90 days.

* Terlipressin is an analogue of vasopressin used as a vasoactive drug in the management of low blood pressure. It has been found to be effective when norepinephrine does not help. It also helps prevent urination. Indications for use include norepinephrine-resistant septic shock and hepatorenal syndrome. In addition, it is used to treat bleeding esophageal varices. Terlipressin must not be used during pregnancy. Terlipressin, commonly used in cirrhosis lowers the pressures in the portal venous system.

* Tezepelumab is a human monoclonal antibody designed for the treatment of asthma and atopic dermatitis. It blocks thymic stromal lymphopoietin (TSLP), an epithelial cytokine that has been suggested to be critical in the initiation and persistence of airway inflammation. TSLP is released in response to multiple triggers associated with asthma exacerbations, including allergens, viruses and other airborne particles. Expression of TSLP is increased in the airways of patients with asthma and has been correlated with disease severity. Blocking TSLP may prevent the release of pro-inflammatory cytokines by immune cells, resulting in the prevention of asthma exacerbations and improved asthma control. Tezepelumab acts at the top of the inflammation cascade and has the potential to treat a broad population of severe asthma patients regardless of their type of inflammation.

* Verdiperstat, also known as BHV-3241, is an oral, brain-penetrant, irreversible inhibitor of MPO. MPO is implicated in neurodegenerative diseases like ALS. Verdiperstat showed beneficial effects on microglial activation in animal models of neurodegenerative diseases including multiple system atrophy and Parkinson’s diseaseVerdiperstat received orphan drug designation from FDA for multiple system atrophy. Verdiperstat is currently being tested in patients with amyotrophic lateral sclerosis (ALS). The MPO enzyme catalyzes the generation of reactive oxygen species by activated microglia and other immune cells. The hypothesized mechanism of action of verdiperstat includes reduction of oxidative stress and neuroinflammation, and

countering cell death due to pathological microglia activation. Treating mice with verdiperstat reduced microglial activation, alpha-synuclein aggregation, and neurodegeneration, and improved motor function. Delaying treatment until mice had developed full-blown pathology still reduced microglial activation and alpha-synuclein aggregation, but did not improve neuron loss or motor impairments. Verdiperstat has been generally safe and well tolerated.

* Vosoritide is a medication used for the treatment of achondroplasia in people two years of age and older whose epiphyses are not closed. Achondroplasia is a genetic disorder whose primary feature is dwarfism. In those with the condition, the arms and legs are short, while the torso is typically of normal length. Those affected have an average adult height of 131 centimetres (4 ft 4 in) for males and 123 centimetres (4 ft) for females. Other features include an enlarged head and prominent forehead. Complications can include sleep apnea or recurrent ear infections. The disorder does not generally affect intelligence. Vosoritide works by binding to a receptor (target) called natriuretic peptide receptor type B (NPR-B), which reduces the activity of fibroblast growth factor receptor 3 (FGFR3). Achondroplasia is rare, and Vosoritide was designated an orphan medicine on January 2013.

1.3.1.42 RT-MB-54

https://archive.org/details/Resonant_Therapy-Molecular_Biology_54

Acitretin; Aldumastat; AMBMP; Bimekizumab; BNTA; CAR-DCN; Cartilage-Mix; Cartilage-Mix/CAR-DCN; Cartilage-Mix-P15-1/Hyaluronan; Daprodustat; Ginsenosides-Mix; Human albumin solution; Imeglimin; Itxasol; JNJ-A07; Kartogenin; Leucine-LL dipeptide; Lubiprostone; Meclinertant; Motilin polypeptide; Nepidermin; Neurotensin neuropeptide; P 15-1 Peptide-Hyaluronan; Proglumide; PY-60; Pyrimidine; Risankizumab; Sephin1;Telmisartan; Vibegron

* Acitretin is a second-generation retinoid. It is taken orally, and is typically used for psoriasis. Acitretin is an oral retinoid used in the treatment of severe resistant psoriasis. Because of the potential for problems and severe side effects it is generally used in only very severe cases of psoriasis that have been unresponsive to other treatments. It binds to nuclear receptors that regulates gene transcription. They induce keratinocyte differentiation and reduce epidermal hyperplasia, leading to the slowing of cell reproduction. Acitretin is readily absorbed and widely distributed after oral administration. A therapeutic effect occurs after two to four weeks or longer. Patients who have received the medication are advised against giving blood for at least three years due to the risk of birth defects. Acitretin is highly teratogenic and noted for the possibility of severe birth defects. It should not be used by pregnant women or women planning to get pregnant within 3 years following the use of acitretin. Sexually active women of childbearing age who use acitretin should also use at least two forms of birth control concurrently. Men and women who use it should not donate blood for three years after using it, because of the possibility that th

e blood might be used in a pregnant patient and cause birth defects. In addition, it may cause nausea, headache, itching, dry, red or flaky skin, dry or red eyes, dry or chapped lips, swollen lips, dry mouth, thirst, cystic acne or hair loss. It is a metabolite of etretinate, which was used prior to the introduction of acitretin. Etretinate was discontinued becau se it had a narrow therapeutic index as well as a long elimination half-life (t1/2=120 day s), making dosing difficult. In contrast, acitretin's half-life is approximately 2 days. Howe ver, because acitretin can be reverse metabolised into etretinate which has an extremel y long half-life, women must avoid becoming pregnant for at least three years after disc ontinuing acitretin. Therefore, acitretin is generally not recommended for women of chil d-bearing age with a risk of becoming pregnant.

* Aldumastat is a potent, selective and orally available ADAMTS5 inhibitor, demonstratin g significant protective efficacy on both cartilage and subchondral bone in two relevant i n vivo preclinical OA models. A disintegrin and metalloproteinase with thrombospondin motifs 5 (ADAMTS5) is a key enzyme in degradation of cartilage in osteoarthritis (OA). Multiple reports have highlighted a link between ADAMTS5 and human OA, suggesting t hat inhibition of this protease could result in reduced aggrecan degradation and eventua lly halt disease progression.

* AMBMP hydrochloride. Failure to properly induce the signaling pathways that are activ ated by exercise and which promote the slow-oxidative gene expression program in mu scle leads to limb girdle muscular dystrophy. AMBMP, a small molecule could activate th ese pathways and restore both the defective signaling and transcriptional patterns need ed to reverse the muscle phenotype. Exercise induces calcium calmodulin kinase activa tion and adaptive gene expression. This signaling is blunted in Capn3 deficiency, causin g limb girdle muscular dystrophy. AMBM, is an exercise mimetic that induces these path ways. AMBMP normalizes the Capn3−/− phenotype.
(https://doi.org/10.1016/j.xcrm.2020.100122)

* Bimekizumab. The active substance in bimekizumab is a monoclonal antibody, a protein designed to attach to interleukins IL-17A, IL-17F and IL-17AF, which are messenger molecules in the body’s immune system (the body’s natural defences). High levels of these interleukins have been shown to be involved in developing inflammatory diseases caused by the immune system, such as plaque psoriasis. By attaching to these interleukins, bimekizumab prevents them from interacting with their receptors (targets) on the surface of the epidermis (outer layer of the skin), which reduces inflammation and improves the symptoms related to plaque psoriasis. Bimekizumab is a humanized anti-IL17A, anti-IL-17F, and anti-IL17AF monoclonal antibody that is used to treat plaque psoriasis. Dual inhibitor antibodies target two different cytokines simultaneously potentially offering a better disease control. Interleukin (IL)-17A and IL-17F share structural homology and have a similar biologic function. IL-17A is classically considered to be the most biologically active, but recent studies have shown that IL-17F is also increased in psoriatic skin and synovial cell in psoriatic arthritis, supporting the rationale for targeting both IL-17A and IL-17F in psoriatic disease. Bimekizumab is the first-in-class monoclonal antibody designed to simultaneously target IL-17A and IL-17F. The most common side effects include upper respiratory tract infections (nose and

throat infection) and oral candidiasis (thrush, a fungal infection in the mouth or throat). Ongoing phase 3 trials are evaluating the drug to treat a variety of other conditions, including psoriatic arthritis, ankylosing spondylitis, non-radiographic axial spondyloarthritis and hidradenitis suppurativa.

* BNTA is a small molecule with extracellular matrix (ECM) modulatory properties. BNTA promotes generation of ECM components in cultured chondrocytes isolated from individuals with osteoarthritis. In human osteoarthritic cartilage explants, BNTA treatment stimulates expression of ECM components while suppressing inflammatory mediators. Intra-articular injection of BNTA delays the disease progression in a trauma-induced rat model of osteoarthritis. BNTA induces SOD3 expression and superoxide anion elimination in osteoarthritic chondrocyte culture, and ectopic SOD3 expression recapitulates the effect of BNTA on ECM biosynthesis.

* CAR-DCN. Most diseases associated with articular cartilage lead to exposure of the bone ends to friction and erosion which causes bone damage. Aberrant immunometabolism has also been implicated with the pathological mechanism driven via the deterioration of cartilage, bone erosion; hyperplastic synovium and systemic consequences. Some other disease/conditions related to cartilage degeneration are known to play crucial roles in the etiology of these diseases. Intravenous injection of CAR-decorin forms recombinant CAR-decorin complexes which selectively accumulate in wound sites, and promote wound healing, without scar formation in a mice wound model. The displayed peptide therefore can be employed for cartilage wound healing process, since osteoarthritis is characterized by a persistent deterioration of the cartilage tissue and non-healing wounds. In addition, selective delivery of decorin to the sites of skeletal muscle damage attenuates the progression of murine muscular dystrophy. Functional analysis revealed that CAR-DCN treatment significantly improved skeletal muscle function and reduced TGFbeta-driven pathologic sarcolemmal permeability in murine MD. The various muscle groups did not respond similarly to the CAR-DCN treatment in terms of fibrosis. Only the canonical skeletal muscles demonstrated decreased fibrosis after the CAR-DCN treatment.

* Cartilage-Mix is a mix of Aldumastat, BNTA, Kartogenin and Lorecivivint.

* Cartilage-Mix/CAR-DCN plays Cartilage-Mix (right) and CAR-DCN (left).

* Cartilage-Mix-P15-1/Hyaluronan plays Cartilage-Mix (right) and P15-1/Hyaluronan (left).

* Daprodustat (GSK1278863) is a drug which acts as a HIF prolyl-hydroxylase inhibitor and thereby increases endogenous production of erythropoietin, which stimulates production of hemoglobin and red blood cells. It is in Phase III clinical trials for the treatment of anemia secondary to chronic kidney disease. Due to its potential applications in athletic doping, it has also been incorporated into screens for performance-enhancing drugs. Daprodustat, improved haemoglobin levels in patients who had not received any standard care, and helped maintain the levels in those who

did. Daprodustat belongs to a new class of medicines that works by copying the body's response to hypoxia, or low oxygen levels, and boosts production of red blood cells by mimicking the body's response to high altitude. Daprodustat did not increase the risk of potentially deadly cardiovascular complications like heart attacks and strokes compared to standard treatment for anaemia associated with kidney disease. Daprodustat, approved only in Japan for use in patients with renal anaemia, was also well-tolerated in both dialysis and non-dialysis patients.

* Ginsenosides-Mix. Ginsenosides are unique to ginseng species, and there are more than 100 ginsenosides that have been identified. Ginsenosides have a variety of biological activities, such as neuroprotection, antioxidation, anticancer, antistress, anti-inflammatory, antiaging, antifatigue, cytotoxicity, inhibiting cell apoptosis, inhibiting platelet aggregation. Recent studies on the therapeutic potential of ginsenosides reveal the molecular mechanisms on cardiovascular diseases, anti-inflammatory, modulation of the endocrine system, immune system diseases, and nervous system diseases.

Left	Right
Ginsenoside RH2	Ginsenoside RG1
Ginsenoside RB1	Ginsenoside RB2
Ginsenoside RG2	Ginsenoside RE
Ginsenoside RD	Ginsenoside RH1

* Human albumin solution is human albumin, sodium chloride, potassium chloride, sodium acetyltryptophanate, sodium caprylate and water. Albumin is a protein produced by the liver that circulates in plasma (the clear liquid portion of your blood). Medicinal albumin is made of plasma proteins from human blood. This medicine works by increasing plasma volume or levels of albumin in the blood. Albumin is used to replace blood volume loss resulting from trauma such as a severe burns or an injury that causes blood loss. This medicine is also used to treat low albumin levels caused by surgery, dialysis, abdominal infections, liver failure, pancreatitis, respiratory distress, bypass surgery, ovarian problems caused by fertility drugs, and other many other conditions. You should not use albumin if you are allergic to it, or if you have: severe anemia (lack of red blood cells); or severe heart failure.

* Imeglimin hydrochloride is an experimental drug being developed as an oral anti-diabetic. It is an oxidative phosphoryl. Imeglimin is an oral anti-diabetic medication. It was approved for use in Japan in June 2021. It is an oxidative phosphorylation blocker that acts to inhibit hepatic gluconeogenesis, increase muscle glucose uptake, and restore normal insulin secretion. It is the first approved drug of this class of anti-diabetic medication. "We believe it is the only oral compound with a dual mechanism of action that is directly designed both to increase insulin secretion in response to glucose and to improve insulin resistance. The mitochondrion is the power station of the cell and its dysfunction is implicated in the pathophysiology of type 2 diabetes. By targeting the mitochondria – where dysfunction is a key feature of diabetes pathophysiology, Imeglimin can simultaneously promote insulin secretion from pancreatic b-cells in response to elevated glucose while also alleviating insulin resistance."

* Itxasol is composed of beta-arbutin, umbelliferon and n-acetylcysteine. This formulation, based on biomimetic principles, makes Itxasol a broad-spectrum antibiotic with bactericidal, bacteriostatic and antifungal properties that is capable of destroying the biofilm and stopping its formation. It also acts as an anti-inflammatory agent, without the adverse effects associated with the recurrent use of antibiotics that leads to renal nephrotoxicity and other side effects. All these characteristics make Itxasol an ideal candidate for the treatment of urinary tract infections (UTIs) since it behaves like an antibiotic and with better characteristics than other adjuvants, such as D-mannose and cranberry extracts. UTIs in women are often associated with sexual intercourse, poor social conditions that limit access to female hygiene products for menstruation and use of contraceptive devices such as diaphragms. In the case of postmenopausal women, recurrent UTIs are related to the low levels of estrogens that produce changes in the vaginal microbiota. In the case of men, UTIs are often related to prostatitis, prostate benign hyperplasia or any kind of urinary obstructive tract pathology. In addition, UTIs are related to smoking, which is also associated with the development of bladder cancer, and it has been reported to increase the risk of suffering from UTIs by up to 50%. Itxasol represents a promising tool in the treatment and prevention of ITUs, and it acts mainly as a broad-spectrum antibiotic protecting the kidney. It may be used for an extended time without generating bacterial resistance, which makes it an excellent alternative treatment to actual antibiotics and other coadjutants.

* JNJ-A07 is a pan-serotype dengue virus inhibitor targeting the NS3–NS4B interaction. JNJ-A07 is a highly potent dengue virus inhibitor that exerts nanomolar to picomolar activity against a panel of 21 clinical isolates that represent the natural genetic diversity of known genotypes and serotypes. The molecule has a high barrier to resistance and prevents the formation of the viral replication complex by blocking the interaction between two viral proteins (NS3 and NS4B), thus revealing a previously undescribed mechanism of antiviral action. JNJ-A07 has a favourable pharmacokinetic profile that results in outstanding efficacy against dengue virus infection in mouse infection models. Delaying start of treatment until peak viraemia results in a rapid and significant reduction in viral load. It represents a major advance in the field of dengue therapeutics as this is the first-ever specific antiviral drug treatment for the virus.

* Kartogenin (KGN) is a small, non-toxic, heterocyclic molecule, it has been known for effectively enhancing the chondrogenic differentiation of human bone marrow MSC (hBMSC), for exhibiting chondroprotective effects in vitro and for reducing cartilage degeneration. KGN interacts with the actin-binding protein filamin A, disrupting its balance with the transcription factor core-binding factor beta (CBFbeta), giving it the ability to enter the nucleus and interact with RUNX1 to form the CBFbeta-RUNX1 complex that activates the transcription of chondrogenesis-related proteins and enhances cartilage ECM synthesis. Kartogenin also inhibits prostate cancer cell growth through Smad2 activation and decreases androgen receptor nuclear localization.

* Leucine-LL dipeptide or dileucine boosts the metabolic processes that drive muscle growth 42% more than free leucine does. Dileucine ingestion elevated intact plasma

dileucine concentrations and was more effective than leucine in stimulating muscle protein turnover by increasing muscle protein synthesis rates in young males. The greater anabolic action of dileucine was not related to intramuscular metabolite concentrations or greater activation of downstream mTORC1 related-signaling, as determined by static snapshots of protein phosphorylation. Dileucine may prove a potential option for food-fortification in anabolic resistant populations (e.g., sarcopenia) given the anabolic potency of dileucine when compared with leucine consumed at the same dose (2 g).

* Lubiprostone is a medication used in the management of chronic idiopathic constipation, predominantly irritable bowel syndrome-associated constipation in women and opioid-induced constipation. It causes the intestines to produce a chloride-rich fluid secretion that softens the stool, increases motility, and promotes spontaneous bowel movements (SBM). In clinical trials, the most common adverse event was nausea (31%) . Other adverse events (≥5% of patients) included diarrhea (13%), headache (13%), abdominal distension (5%), abdominal pain (5%), flatulence (6%), sinusitis (5%), vomiting (5%), and fecal incontinence (1%). Contraindicated in known or suspected mechanical GI obstruction and known hypersensitivity to lubiprostone or any ingredient in the formulation. There is no current data on use in people with liver or kidney complications. The effects on pregnancy have not been studied in humans but testing in guinea pigs resulted in fetal loss. Lubiprostone is not approved for use in children. Lubiprostone is contraindicated in patients exhibiting chronic diarrhea, bowel obstruction, or diarrhea-predominant irritable bowel syndrome. Lubiprostone is a bicyclic fatty acid derived from prostaglandin E1 that acts by specifically activating ClC-2 chloride channels on the apical aspect of gastrointestinal epithelial cells, producing a chloride-rich fluid secretion. These secretions soften the stool, increase motility, and promote spontaneous bowel movements (SBM). Symptoms of constipation such as pain and bloating are usually improved within one week, and SBM may occur within one day. Unlike many laxative products, lubiprostone does not show signs of drug tolerance, chemical dependency, or altered serum electrolyte concentration. There was no rebound effect following withdrawal of treatment, but a gradual return to pre-treatment bowel movement frequency should be expected. Minimal distribution of the drug occurs beyond the immediate gastrointestinal tissues. Lubiprostone is rapidly metabolized by reduction/oxidation, mediated by carbonyl reductase. There is no metabolic involvement of the hepatic cytochrome P450 system. The measurable metabolite, M3, exists in very low levels in plasma and makes up less than 10% of the total administered dose. Data indicate that metabolism occurs locally in the stomach and jejunum. Lubiprostone has not been linked to serum enzyme elevations during treatment or to episodes of clinically apparent liver injury.

* Meclinertant (SR-48692) is a drug which acts as a selective, non-peptide antagonist at the neurotensin receptor NTS1, and was the first non-peptide antagonist developed for this receptor. Meclinertant is the most potent and selective non-peptide NT antagonist developed so far. SR-48692 promotes the emptying of the stomach and defecation. It is used in scientific research to explore the interaction between neurotensin and other neurotransmitters in the brain, and produces anxiolytic, anti-addictive and memory-

impairing effects in animal studies. Investigated for use/treatment in colorectal cancer, prostate cancer, schizophrenia and schizoaffective disorders, psychosis, depression, and lung cancer. This compound is orally active, crosses the blood brain barrier (BBB), and has a long-lasting action. It also displays a much higher affinity for NTS1 (IC50 = 5.6 nM) than for NTS2 (IC50 = 300 nM) and NTS3. SR48692 blocks the neurotensin proinflammatory action in colonic inflammation associated with Clostridium difficile pseudomembranous colitis. SR48692 effectively blocks also some of the physiological effects of neurotensin, such as the increase in potassium-evoked dopamine release in striatal slices, the turning behavior induced by application of neurotensin, or the hypolocomotion induced by i.c.v injections of neurotensin. SR48692 competitively antagonizes NTS-mediated effects, such as tumor promotion in various cancers. SR48692 is a potent and full competitive antagonist of neurotensin-induced Ca++ mobilization in the human carcinoma HT-29 cell line. Furthermore, it was shown to reduce the level of basal activity in constitutively active NTSR1 mutants, revealing inverse agonist properties.

* Motilin polypeptide is a 22-amino acid polypeptide hormone in the motilin family that, in humans, is encoded by the MLN gene. It is released into the general circulation in humans at about 100-min intervals during the inter-digestive state and is the most important factor in controlling the inter-digestive migrating contractions; and it also stimulates endogenous release of the endocrine pancreas. Based on amino acid sequence, motilin is unrelated to other hormones. Because of its ability to stimulate gastric activity, it was named "motilin". Apart from in humans, the motilin receptor has been identified in the gastrointestinal tracts of pigs, rats, cows, and cats, and in the central nervous system of rabbits. Control of motilin secretion is largely unknown, although some studies suggest that an alkaline pH in the duodenum stimulates its release. However, at low pH it inhibits gastric motor activity, whereas at high pH it has a stimulatory effect. The main function of motilin is to increase the migrating myoelectric complex component of gastrointestinal motility and stimulate the production of pepsin. Motilin is also called "housekeeper of the gut" because it improves peristalsis in the small intestine and clears out the gut to prepare for the next meal. A high level of motilin secreted between meals into the blood stimulates the contraction of the fundus and antrum and accelerates gastric emptying. It then contracts the gallbladder and increases the squeeze pressure of the lower esophageal sphincter. Other functions of motilin include increasing the release of pancreatic polypeptide and somatostatin.

* Nepidermin, also known as recombinant human epidermal growth factor (rhEGF), is a recombinant form of human epidermal growth factor (EGF) and a cicatrizant (a drug that promotes wound healing through formation of scar tissue). As a recombinant form of EGF, nepidermin is an agonist of the epidermal growth factor receptor (EGFR), and is the first EGFR agonist to be marketed. It is marketed as an ointment for the treatment of diabetic foot ulcers, wounds, and alopecia (hair loss) in Vietnam, the Philippines, Thailand, and China. As of 2017 it was in clinical trials in South Korea for the treatment of stomatitis (inflammation of the mouth or lips) and for reversal of skin side effects caused by erlotinib (an EGFR inhibitor).

* Neurotensin neuropeptide is a 13 amino acid neuropeptide that is implicated in the regulation of luteinizing hormone and prolactin release and has significant interaction with the dopaminergic system. Neurotensin was first isolated from extracts of bovine hypothalamus based on its ability to cause a visible vasodilation in the exposed cutaneous regions of anesthetized rats. Neurotensin is distributed throughout the central nervous system, with highest levels in the hypothalamus, amygdala and nucleus accumbens. It induces a variety of effects, including analgesia, hypothermia and increased locomotor activity. It is also involved in regulation of dopamine pathways. In the periphery, neurotensin is found in enteroendocrine cells of the small intestine, where it leads to secretion and smooth muscle contraction. Some of the physiologic effects of NT in the GI tract are related to motility. An infusion of NT mimics the consumption of a fat-rich meal (the most potent stimulator of NT release) in the following ways: NT decreases lower esophageal sphincter pressure, slows gastric emptying and intestinal transit while increasing colonic motility, and inhibits the migrating motor complex (MMC).

* P15-1 Peptide/Hyaluronan. TMMSRSHKTRSHHV may increase the capacity of bone-marrow-derived mesenchymal stem cells (BMSCs) to repair cartilage via the protection of these cells in an inflammatory environment and the stimulation of their attachment to an HA-containing matrix and chondrogenic differentiation. Since the avascular articular cartilage must deal with frictional forces, scar formation is unwanted; therefore the ability to ensure scarless healing is of paramount importance. P15-1 may act as an anti-inflammatory factor that may reduce inflammation in the osteoarthritic joint or injured joint. Based on these findings, it can be speculated that P15-1 by reducing the inflammatory injury environment may enhance the repair process of the injured tissue by mesenchymal stem cells (MSCs). P15-1 decreased the expression of catabolic markers, such as Cox-2 and IL-6, and the expression of matrix-degrading matrix metalloproteinases, MMP-3 and MMP-13 in human BMSCs cultured in an inflammatory environment (in the presence of IL-1beta). In addition, the peptide decreased the expression of the HA-degrading enzyme, Hyal2, and decreased the expression of the inflammatory receptors TRL2 and TLR4 in IL-1beta-treated human BMSCs. P15-1 may provide a novel compound that may help to maintain the anti-inflammatory properties of MSCs in an inflammatory environment during tissue repair or diseases and promote the attachment, settlement, and differentiation of MSCs to an hyaluronan HA-containing matrix at a repair site. P15-1 prevents staphyloccal wound infection, reduces wound fibrosis; modulates neutrophils, M1 macrophages and dermal fibroblasts. P15-1 significantly reduced wound macrophage number, fibroblast number, and blood vessel density compared to negative control peptides in rat wounds and promoted scarless wound healing. P15-1 blocks the receptor for hyaluronan mediated motility RHAMM-regulated focal adhesion kinase pathways in fibroblasts and attenuated fibrotic repair by blocking hyaluronan oligosaccharide signaling.

* Proglumide is a drug that inhibits gastrointestinal motility and reduces gastric secretions. It acts as a cholecystokinin antagonist, which blocks both the CCKA and CCKB subtypes. It was used mainly in the treatment of stomach ulcers.
An interesting side effect of proglumide is that it enhances the analgesia produced by opioid drugs, and can prevent or even reverse the development of tolerance to opioid

drugs. This can make it a useful adjuvant treatment to use alongside opioid drugs in the treatment of chronic pain conditions such as cancer, where opioid analgesics may be required for long periods and development of tolerance reduces clinical efficacy of these drugs. Proglumide has also been shown to act as a delta-opioid agonist, which may contribute to its analgesic effects. Proglumide also works as a placebo effect amplifier for pain conditions. When injected visibly to a subject, its analgesic effect is bigger than a similarly administered placebo. When injected secretly, it does not have any effect, whereas standard pain drugs have an effect, even if they are administered without the subject's awareness. The supposed mechanism is an enhancement of the neural pathways of expectation as a result of dopamine and endogenous opioids being suddenly released throughout numerous structures of the brain and spinal cord. The ventral tegmental area is the structure believed to mediate proglumides analgesic and euphoric effects, however dozens of areas with a wide range of physical and psychological functions are implicated in the mediation of the placebo effect (this accounts for proglumides ability to produce physically measurable effects on vital signs such as heart rate, blood pressure, respiration rate, and tidal volume which can not be accounted for by its clinically insignificant delta-opioid affinity.

* PY-60 is a robust and specific activator of YAP transcriptional activity that targets annexin A2 (ANXA2). PY-60 directly binds to ANXA2 and antagonizes its normal cellular function of repressing YAP activity. PY-60 results in an approximate doubling of epidermal thickness, a result derived from an increased number of keratinocytes per unit length of skin. This is a new approach for treating diabetic foot ulcers, which affect millions of people in the US and often lead to serious complications. By targeting a gene that controls tissue growth and regeneration, the scientists were able to boost cell division at the site of injury and repair chronic wounds quickly. At the core of the new approach is a gene known as YAP, which is known to control organ size and tissue regeneration. YAP is regulated via a pathway called Hippo--often a target of cancer drugs due to its ability to influence cell growth. Through their research, the scientists found a previously unknown player in the Hippo pathway--a protein that works with YAP to communicate cell density; when an organ or other tissue reaches a certain concentration, the cells will stop growing. But by targeting this protein with the new drug molecule, tissue cells bounce back into production mode. The healing process happens quickly and without producing negative side effects; in experiments, the outer skin layer doubled in a week.

* Pyrimidine is a heterocyclic aromatic organic compound containing two nitrogen atoms at positions 1 and 3 of the six- member ring. Pyrimidine posses wide spectrum of biological activities including anti-tubercular, anti-bacterial, anti-fungal, anti-viral, anti-inflammatory, anti-malarial activity, anti-cancer and anti-neoplastic activity, anti-hiv activity. Common indications of acute inflammation include swelling, redness, pain, immobility, and heat. Acute inflammation can be caused by certain conditions and diseases including acute bronchitis, abrasion or cut on the skin, achy throat from flu or cold, infected ingrown toenail, acute appendicitis, sinusitis, tonsillitis, dermatitis, infective meningitis, high-intensity exercise, and physical trauma. (DOI: 10.1039/d0ra10657g) Pyrimidine derivatives also play an important role in drug

development, either in concert with other compounds or on their own. They have been used in a wide variety of pharmaceuticals including general anesthetics, anti-epilepsy medication, anti-malaria medication, drugs for treating high blood pressure, and HIV medication.

* Risankizumab is a humanized monoclonal antibody targeting interleukin 23A (IL-23A). Risankizumab has been approved in the European Union, the United States, and Canada for the treatment of moderate to severe plaque psoriasis in adults who are candidates for systemic therapy. In Japan, it is approved for treating plaque psoriasis, generalized pustular psoriasis, erythrodermic psoriasis and psoriatic arthritis in adults who have an inadequate response to conventional therapies. Risankizumab was approved by the U.S. Food and Drug Administration (FDA) for treatment of moderate-to-severe plaque psoriasis in April 2019.

* Sephin1 hydrochloride selectively inhibits PPP1R15A/PP1c phosphatase complex, which in turn maintains an active Integrated Stress Response (ISR). The compound has been shown preclinically to cross the blood brain barrier, which is critical to targeting diseases of the central nervous system. Being able to cross this barrier and target CNS conditions and their core opens up new possibilities in the treatment of neurodegenerative and neuromuscular conditions. Sephin1 modulates eIF2alpha, the ISR's biomolecular switch. When this switch is turned on, by phosphorylation of eIF2alpha, cells are able to respond to protein imbalances to reduce harmful levels of defective proteins. So long as PPP1R15A/PP1c is inhibited, the biomolecular switch – the phosphorylated eIF2alpha – remains turned on, prolonging the natural benefit of the ISR and giving cells additional time to correct protein imbalances and repair or eliminate misfolded proteins. Preclinical research has repeatedly and consistently shown the ability of PPP1R15A inhibitors to prolong ISR activity in defective cells and prevent cytotoxicity. Further, preclinical and clinical research has shown promise in treating neuromuscular diseases, through remyelination in patients with Charcot-Marie-Tooth (CMT) and Multiple sclerosis (MS), and motor function improvement in Amyotrophic lateral sclerosis (ALS) patients. This includes demonstrating remyelination, which holds promise for treating neuromuscular diseases, through remyelination in people living with CMT and MS, and motor function improvement in people living with ALS.

* Telmisartan is a medication used to treat high blood pressure, heart failure, and diabetic kidney disease. It is a reasonable initial treatment for high blood pressure. Common side effects include upper respiratory tract infections, diarrhea, and back pain. Serious side effects may include kidney problems, low blood pressure, and angioedema. Use in pregnancy may harm the baby and use when breastfeeding is not recommended. Also it is contraindicated in bilateral renal artery stenosis in which it can cause kidney failure. It is an angiotensin II receptor antagonist and works by blocking the effects of angiotensin II. Due to its mechanism of action, telmisartan increases blood potassium levels. Combination with potassium preparations or potassium-sparing diuretics could cause hyperkalaemia (excessive potassium levels). Combination with NSAIDs, especially in patients with impaired kidney function, has a risk of causing (usually reversible) kidney failure.

* Vibegron is a beta3-adrenergic receptor agonist currently in clinical development for the treatment of patients with overactive bladder. Vibegron is a potent, selective beta-3 adrenergic receptor agonist that relaxes the detrusor smooth muscle of the bladder, thereby increasing bladder capacity. Vibegron was first approved in Japan in September 2018 for the treatment of overactive bladder, a condition associated with distressing symptoms of urge urinary incontinence, urgency, and urinary frequency, and reduced quality of life of patients. On December 23, 2020, vibegron was approved for the same indication in adults. Vibegron is the second beta-3 adrenergic agonist approved for the treatment of overactive bladder following [mirabegron], which was approved in 2012. Unlike mirabegron, vibegron is less likely to be associated with drug-drug interactions involving the CYP3A4, 2D6, or 2C9 enzymes. The most common side effects include headache, urinary tract infection, common cold, diarrhea, nausea, and upper respiratory tract infection. Vibegron treatment should be discontinued when the patient develops urinary retention. Indication is more precautious as well when other muscarinic antagonists are used that are not selective. In addition, discontinuation of treatment is suggested when digoxin concentrations are too high. Primary outcomes of different clinical trials showed there was an overall increase in efficacy. These outcomes concluded that there was a reduction in urgency to urinate, a decrease in micturitions and a decrease in average volume voided per micturition. There is also an improvement observed of the symptoms when Vibegron is administered over a longer period (52 weeks) concluding that it is effective and safe for longer use. In severe patients, increasing the dose was accompanied by similar beneficial effects when there was first a lack of these. Quality of life of the patients is improved, including a reduction of nocturia.

1.3.1.43 RT-MB-55

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A-804598; AC1903; Acotiamide; Adenosine; Arctigenin; Artemisinin; Benfotiamine; Beta-Glucans; Bethanechol; Bis-T-23; Camicinal; Chlorogenic acid; Chromium Picolinate; Dihydroartemisinin; Esmolol; Fampridine; Finerenone; Glibenclamide; GRC-6211; Hyoscyamine; LM22B-10; Lutein; Magnesium gluconate; Magnesium glycinate; Omigapil; Polidocanol; Relenopride; Sotradecol; SR-7826-LIMKi3; Voglibose

* A-804598 is a selective P2X7 receptor antagonist, the purinergic P2X7 receptor has been implicated in several inflammatory conditions. Inflammatory conditions of the urinary bladder have been shown to be associated with urothelial damage and loss of function. The P2X7 receptor activation is known to induce apoptosis. In the presence of a high extracellular concentration of ATP, which is highly related to the pathophysiological condition of interstitial cystitis, the P2X7 receptor can stay activated for a longer time leading to increased intracellular calcium levels as well as increased cell permeability to larger molecules leading to downstream signaling resulting in apoptosis and cell death. A study

demonstrates the protective effect of the P2X7 receptor inhibition on the urothelium in a n ex-vivo acrolein model of bladder cystitis. The findings from this study provide evidenc e for the use of the P2X7 receptor antagonists for treatment of the bladder inflammation. (https://doi.org/10.3389/fphar.2021.682520)

* AC1903 is a small molecule specific and selective inhibitor of TRPC5 (transient recept or potential canonical channel 5). Progressive kidney diseases are often associated with scarring of the kidney's filtration unit, a condition called focal segmental glomerulosclero sis (FSGS). This scarring is due to loss of podocytes, cells critical for glomerular filtratio n, and leads to proteinuria and kidney failure. Chronic administration of AC1903 suppres sed severe proteinuria and prevented podocyte loss in a transgenic rat model of FSGS. AC1903 also provided therapeutic benefit in a rat model of hypertensive proteinuric kidn ey disease. These data indicate that TRPC5 activity drives disease and that TRPC5 inhi bitors may be valuable for the treatment of progressive kidney diseases.
(doi: 10.1126/science.aal4178) (https://doi.org/10.3390/cells10040869)

* Acotiamide is a prokinetic drug manufactured and approved in Japan for the treatment of postprandial fullness, upper abdominal bloating, and early satiation due to functional dyspepsia. It acts as an acetylcholinesterase inhibitor. Acotiamide enhances acetylcholi ne release in the enteric nervous system by antagonizing M1 and M2 muscarinic recept ors and also inhibiting acetylcholinesterase. It significantly enhances the gastric accom modation reflex and gastric emptying rate in functional dyspepsia FD patients.

* Adenosine is an organic compound that occurs widely in nature in the form of diverse derivatives. Adenosine is one of four nucleoside building blocks to DNA and RNA, which are essential for all life. Adenosine is also used as a medication. In individuals with supr aventricular tachycardia (SVT), adenosine is used to help identify and convert the rhyth m. In addition, atrial tachycardia can sometimes be terminated with adenosine. Because of the effects of adenosine on AV node-dependent SVTs, adenosine is considered a clas s V antiarrhythmic agent. The recommended dose may be increased in patients on theo phylline since methylxanthines prevent binding of adenosine at receptor sites. The dose is often decreased in patients on dipyridamole (Persantine) and diazepam (Valium) bec ause adenosine potentiates the effects of these drugs. The recommended dose is also r educed by half in patients presenting congestive heart failure, myocardial infarction, sho ck, hypoxia, and/or chronic liver disease or chronic kidney disease, and in elderly patien ts. Methylxanthines (e.g. caffeine found in coffee, theophylline found in tea, or theobromi ne found in chocolate) have a purine structure and bind to some of the same receptors as adenosine. Methylxanthines act as competitive antagonists of adenosine and can blu nt its pharmacological effects. Individuals taking large quantities of methylxanthines may require increased doses of adenosine. Common contraindications for adenosine include Asthma. Adenosine is an endogenous purine nucleoside that modulates many physiolog ical processes. Cellular signaling by adenosine occurs through four known adenosine re ceptor subtypes (A1, A2A, A2B, and A3). In regard to stress or injury, the function of ade nosine is primarily that of cytoprotection preventing tissue damage during instances of h ypoxia, ischemia, and seizure activity. Activation of A2A receptors produces a constellati on of responses that in general can be classified as anti-inflammatory. Enzymatic produ

ction of adenosine can be anti-inflammatory or immunosuppressive. Topical treatment of adenosine to foot wounds in diabetes mellitus has been shown in lab animals to drastic ally increase tissue repair and reconstruction. In general, adenosine has an inhibitory eff ect in the central nervous system (CNS). Caffeine's stimulatory effects are credited prim arily (although not entirely) to its capacity to block adenosine receptors, thereby reducin g the inhibitory tonus of adenosine in the CNS. Adenosine has been shown to promote t hickening of hair on people with thinning hair. A 2013 study compared topical adenosine with minoxidil in male androgenetic alopecia, finding it was as potent as minoxidil (in ov erall treatment outcomes) but with higher satisfaction rate with patients due to “faster pr evention of hair loss and appearance of the newly grown hairs”.

* Arctigenin is a phenylpropanoid dizbenzylbutyrolactone lignan, first identified in Arctiu m lappa L (A lappa), is a popular medicinal herb and health supplement frequently used for anti-influenza treatment in Asia, especially China, Korea and Japan. ATG and arctiin-containing plants are recorded as medical plants in their growing areas and are well-rec ognized for the treatment of diseases, such as rheumatic arthritis, inflammatory disease s, infection, and others. ATG has attracted the attention of researchers due to its promisi ng therapeutic effects on inflammation, infection, metabolic disorders, and central nervo us system dysfunctions. A number of chronic diseases, including atherosclerosis, cancer type II diabetes, and Alzheimer's disease, have a pathophysiologically important inflam matory component. ATG reduced the infiltration of leukocytes into local tissues, a typical hallmark of acute inflammation. This was observed in various colitis mouse models by t he decreased activity of myeloperoxidase (MPO), eosinophil peroxidase (EPO), and clu ster of differentiation 68 (CD68), indicators of neutrophils, eosinophils and macrophages, respectively. In addition, AR reduced brain water content and hematoma and accelerat ed wound closure in convection-enhanced delivery induced brain injury in mice through regulation of various inflammatory factors and numbers of MPO-positive cells. Arctigeni n could inhibit liver cancer growth by directly recruiting C/EBPalpha to the gankyrin pro moter. PPARalpha subsequently bound to C/EBPalpha, and both had a negative regulat ory effect on gankyrin expression. Arctigenin was found to have a beneficial effect on pa ncreatic cancer in a phase I clinical study. The use of arctigenin has been shown to be e ffective in a mouse model of Japanese encephalitis. Arctigenin (ATG), reduces p65 NF-κ B (also known as RelA)-mediated inflammation and Drebrin-1 (DBN1)-mediated podocy te injury by enhancing the activity of protein phosphatase 2 (PP2A) in podocytes, thereb y protecting kidney function.

* Artemisinin and its derivatives play a significant role in treating other diseases, apart fr om malaria. Artemisinin regulates inflammation and apoptosis, which, together with anti oxidant effects, supports an argument for the use of artemisinin in different pathologies. Artemisinin and its derivatives have great potential in the treatment of Type-2 Diabetes Mellitus T2DM, whether in the early stage or late stage of the disease. (https://doi.org/1 0.3389/fphar.2020.585487) Because artemisinin has consistently been considered safe and effective in clinical practice and was officially recommended by WHO in the 1980s, i t is likely among the less toxic traditional chinese herbal medicine TCHM treatments wit h hepatoprotective effects. This applies to artemisinin derivatives as well, with one study showing that an oral dose of 2.2–3.9 mg/kg/d ART (add-on oncological therapy) is safe

and well tolerated by subjects with metastatic breast cancer, without altering kidney function, liver function, or routine blood tests. As opposed to other TCHM treatments with unclear hepatoprotective mechanisms, artemisinin and its derivatives are known to protect the liver through antioxidant, anti-inflammatory, pro-apoptotic, and carcinostatic mechanisms. The structure of endoperoxide linkage and production of ROS is not only regarded as a vital feature for antimalarial treatment, but is also key to liver protection. (https://doi.org/10.1186/s13020-021-00489-0)

* Benfotiamine is a synthetic S-acyl derivative of thiamine (vitamin B1) that sold as a medication or dietary supplement to treat diabetic neuropathy. Benfotiamine is more bioavailable than thiamine salts, providing higher levels of thiamine in muscle, brain, liver, and kidney. Benfotiamine is dephosphorylated to S-benzoylthiamine by ecto-alkaline phosphatases present in the intestinal mucosa, and is then hydrolyzed to thiamine by thioesterases in the liver. Benfotiamine mainly acts on peripheral tissues through an increase in transketolase activity.Benfotiamine is a synthetic S-acyl Vitamin B1 analogue; its chemical name is S-benzoylthiamine O-monophosphate. Benfotiamine is a lipid derivative of thiamine vitamin. It has very low solubility in water or other aqueous solvents. Administration of benfotiamine may increase intracellular levels of thiamine diphosphate, a cofactor of transketolase, and based on metabolic theories of Alzheimer's disease, it has been studied in preclinical models of Alzheimer's disease.

* Beta-Glucans refers to a group of beta-D-glucose polysaccharides naturally occurring in the cell walls of cereals, bacteria, and fungi, with significantly differing physicochemical properties dependent on source. Typically, beta-glucans form a linear backbone with 1–3 beta-glycosidic bonds but vary with respect to molecular mass, solubility, viscosity, branching structure, and gelation properties, causing diverse physiological effects in animals. Indications Aggression (Phase 4); Aggressive Periodontitis (Phase 4); Atherosclerosis; Breast Neoplasms (Phase 2); Burns (Phase 1); Carcinoma, Non-Small-Cell Lung; Cardiovascular Diseases; Colitis (Phase 3); Colitis, Ulcerative (Phase 3); Common Cold; Diabetes Mellitus (Phase 2); Diabetes Mellitus, Type 2 (Phase 2); Diabetic Foot (Phase 3); Disease; Dyslipidemias; Fatty Liver; Foot Ulcer (Phase 3); Head and Neck Neoplasms (Phase 3); Hemorrhage (Phase 4); Hemorrhoids (Phase 4); Hyperglycemia; Hyperlipidemias (Phase 3); Hypertension; Immunologic Deficiency Syndromes; Insulin Resistance; Irritable Bowel Syndrome; Leg Ulcer (Phase 2); Leukemia (Phase 2); Leukemia, Lymphocytic, Chronic, B-Cell (Phase 2); Leukemia, Lymphoid (Phase 2); Liver Diseases; Lung Neoplasms (Phase 1); Lymphoma (Phase 2); Lymphoma, Non-Hodgkin (Phase 1); Lymphoproliferative Disorders (Phase 1); Metabolic Syndrome; Mucositis (Phase 3); Neuroblastoma (Phase 2); Non-alcoholic Fatty Liver Disease; Obesity, Abdominal; Overweight (Phase 3); Periodontitis (Phase 4); Prediabetic State; Stomatitis (Phase 3); Syndrome; Ulcer (Phase 3).

* Bethanechol is a parasympathomimetic choline carbamate that selectively stimulates muscarinic receptors without any effect on nicotinic receptors. Unlike acetylcholine, bethanechol is not hydrolyzed by cholinesterase and will therefore have a long duration of action. Bethanechol alleviates dry mouth and is sometimes given orally or

subcutaneously to treat urinary retention resulting from general anesthetic, diabetic neuropathy of the bladder, or a side effect of antidepressants; or to treat gastrointestinal lack of muscular tone. The muscarinic receptors in the bladder and gastrointestinal tract stimulate contraction of the bladder and expulsion of urine, and increased gastrointestinal motility, respectively. Bethanechol should be used to treat these disorders only after mechanical obstruction is ruled out as a possible cause. Its potential benefit in the treatment of cerebral palsy has been investigated. Atropine is given preoperatively to prevent voiding of the bowel/bladder during surgery, Bethanechol is then given postoperatively to revert this action. Use of bethanechol, as well as all other muscarinic receptor agonists, is contraindicated in patients with asthma, coronary insufficiency, peptic ulcers, intestinal obstruction and hyperthyroidism. The parasympathomimetic action of this drug will exacerbate the symptoms of these disorders.

* Bis-T-23 promotes actin-dependent dynamin oligomerization and thus increased actin polymerization in injured podocytes, was sufficient to improve renal health in diverse models of both transient kidney disease and CKD. In particular, administration of Bis-T-23 in these renal disease models restored the normal ultrastructure of podocyte foot processes, lowered proteinuria, lowered collagen IV deposits in the mesangial matrix, diminished mesangial matrix expansion and extended lifespan. These results further establish that alterations in the actin cytoskeleton of kidney podocytes is a common hallmark of CKD, while also underscoring the substantial regenerative potential of injured glomeruli and identifying the oligomerization cycle of dynamin as an attractive potential therapeutic target to treat CKD. Bis-T-23 was able to induce actin and vinculin rearrangement and recovery in these injured cells. This is the first experimental evidence that ameliorating alterations in actin cytoskeleton might be beneficial in humans with nephrotic diseases. Dysregulation of the actin cytoskeleton in podocytes represents a common pathway in the pathogenesis of proteinuria across a spectrum of chronic kidney diseases (CKD). The GTPase dynamin has been implicated in the maintenance of cellular architecture in podocytes through its direct interaction with actin. Furthermore, the propensity of dynamin to oligomerize into higher-order structures in an actin-dependent manner and to cross-link actin microfilaments into higher-order structures has been correlated with increased actin polymerization and global organization of the actin cytoskeleton in the cell.

* Camicinal is a prokinetic agent and motilin agonist for the treatment of gastroparesis. Gastroparesis, also called delayed gastric emptying, is a medical disorder consisting of weak muscular contractions (peristalsis) of the stomach, resulting in food and liquid remaining in the stomach for a prolonged period of time. Stomach contents thus exit more slowly into the duodenum of the digestive tract. This can result in irregular absorption of nutrients, inadequate nutrition, and poor glycemic control. Symptoms include nausea, vomiting, abdominal pain, feeling full soon after beginning to eat (early satiety), abdominal bloating, and heartburn. The most common known mechanism is autonomic neuropathy of the nerve which innervates the stomach: the vagus nerve. Uncontrolled diabetes mellitus is a major cause of this nerve damage; other causes include post-infectious and trauma to the vagus nerve.

* Chlorogenic acid (CGA) is the ester of caffeic acid and (−)-quinic acid, functioning as an intermediate in lignin biosynthesis. Despite the "chloro" of the name, chlorogenic acids contain no chlorine. The term "chlorogenic acids" refers to a related polyphenol family of esters, including hydroxycinnamic acids with quinic acid. Chlorogenic is an important and biologically active dietary polyphenol, playing several important and therapeutic roles such as antioxidant activity, antibacterial, hepatoprotective, cardioprotective, anti-inflammatory, antipyretic, neuroprotective, anti-obesity, antiviral, anti-microbial, anti-hypertension, free radicals scavenger and a central nervous system stimulator. Chlorogenic acid has been studied as a possible chemical sensitizer involved in respiratory allergy to certain plant materials. Taken as a dietary supplement or in coffee, chlorogenic acid slightly reduces blood pressure. Indications, Body Weight, Diabetes Mellitus, Diabetes Mellitus, Type 2 (Phase 3), Dyslipidemias, Fatty Liver (Phase 3), Glioblastoma (Phase 1), Glucose Intolerance (Phase 2), Lung Neoplasms (Phase 2), Metabolic Syndrome, Neoplasms (Phase 1), Non-alcoholic Fatty Liver Disease (Phase 3), Overweight, Renal Insufficiency, Renal Insufficiency, Chronic Syndrome, Weight Loss.

* Chromium(III) Picolinate (CrPic3) is a chemical compound sold as a nutritional supplement to treat type 2 diabetes and promote weight loss. This bright-red coordination compound is derived from chromium(III) and picolinic acid. Large quantities of chromium are needed for glucose utilization by insulin in normal health, but deficiency is extremely common and has been observed in people receiving 100% of their nutrient needs intravenously, i.e., total parenteral nutrition diets. Chromium has been identified as regulating insulin by increasing the sensitivity of the insulin receptor. As such, chromium(III) picolinate has been proposed as a treatment for type 2 diabetes, although its effectiveness remains controversial due to conflicting evidence from human trials.

* Dihydroartemisinin (DHA) is a derivative of Artemisinin and the active metabolite of all artemisinin compounds (artemisinin, artesunate, artemether, etc.) Artemisinin and its derivatives also play a significant role in treating other diseases, apart from malaria. Artemisinin regulates inflammation and apoptosis, which, together with antioxidant effects, supports an argument for the use of artemisinin in different pathologies. Artemisinin and its derivatives have great potential in the treatment of Type-2 Diabetes Mellitus T2DM, whether in the early stage or late stage of the disease. (https://doi.org/10.3389/fphar.2020.585487) Because artemisinin has consistently been considered safe and effective in clinical practice and was officially recommended by WHO in the 1980s, it is likely among the less toxic Traditional chinese herbal medicine TCHM treatments with hepatoprotective effects. This applies to artemisinin derivatives as well, with one study showing that an oral dose of 2.2–3.9 mg/kg/d ART (add-on oncological therapy) is safe and well tolerated by subjects with metastatic breast cancer, without altering kidney function, liver function, or routine blood tests. As opposed to other TCHM treatments with unclear hepatoprotective mechanisms, artemisinin and its derivatives are known to protect the liver through antioxidant, anti-inflammatory, pro-apoptotic, and carcinostatic mechanisms. The structure of endoperoxide linkage and production of ROS is not only regarded as a vital feature for antimalarial treatment, but

is also key to liver protection.
(https://doi.org/10.1186/s13020-021-00489-0)

* Esmolol is a beta 1 adrenergic receptor antagonist with rapid onset, a very short duration of action, and no significant intrinsic sympathomimetic or membrane stabilising activity at therapeutic dosages. It is a class II antiarrhythmic. Esmolol decreases the force and rate of heart contractions by blocking beta-adrenergic receptors of the sympathetic nervous system, which are found in the heart and other organs of the body. Esmolol prevents the action of two naturally occurring substances: epinephrine and norepinephrine. Used in medicine to terminate supraventricular tachycardia, episodic atrial fibrillation or flutter, arrhythmia during anaesthesia, to reduce HR and BP during and after cardiac surgery, and in early treatment of myocardial infarction. Esmolol is also used in blunting the hemodynamic response to laryngoscopy and intubation. It has applications in foot disorder therapies, skin disorder therapies and diabetic foot ulcers. Esmolol is a cardioselective beta-blocker used in parenteral forms in the treatment of arrhythmias and severe hypertension. Esmolol has not been linked to instances of clinically apparent drug induced liver injury. It has a rapid onset but short duration of action without causing significant intrinsic sympathomimetic or membrane stabilizing activities at recommended therapeutic doses. Esmolol re-triggers natural wound healing processes impaired due to diabetic condition.

* Fampridine is an organic compound, the molecule is one of the three isomeric amines of pyridine. It is used as a research tool in characterizing subtypes of the potassium channel. It has also been used as a drug, to manage some of the symptoms of multiple sclerosis, and is indicated for symptomatic improvement of walking in adults with several variations of the disease. It was undergoing Phase III clinical trials as of 2008, and the U.S. Food and Drug Administration (FDA) approved the compound on January 22, 2010. Fampridine is a potent convulsant and is used to generate seizures in animal models for the evaluation of antiseizure agents. 4-Aminopyridine (Fampridine) is also used in bird control bait. It causes convulsions and, infrequently, death, depending on dosage. Fampridine has been used clinically in Lambert-Eaton myasthenic syndrome and multiple sclerosis. It acts by blocking voltage-gated potassium channels, prolonging action potentials and thereby increasing neurotransmitter release at the neuromuscular junction. The drug has been shown to reverse saxitoxin and tetrodotoxin toxicity in tissue and animal experiments. In calcium entry blocker overdose in humans, 4-aminopyridine can increase the cytosolic Ca2+ concentration very efficiently independent of the calcium channels. Fampridine has been shown to improve visual function and motor skills and relieve fatigue in patients with multiple sclerosis (MS). In a case series, 1 out of 23 MS participants reported improvements in urinary and fecal incontinence. Two of the four participants in spinal cord injury showed improvements in the number of bowel movements. Neurogenic bowel dysfunction (NBD) is a common problem for people with spinal cord injury (SCI) and multiple sclerosis (MS), which seriously impacts quality of life. The major symptoms of NBD are fecal incontinence and constipation. Hyperreflexic bowel fecal incontinence occurs due to reduced or absent anorectal sensation and lack of voluntary control of the external anal sphincter muscle. Areflexic bowel, usually occurs with injuries at the sacral spinal cord or below and is

characterized by the loss of centrally mediated (spinal cord) peristalsis and loss of reflex activity, resulting in slow stool propulsion and impaired reflex stool evacuation. However, the effect of the drug is strongly established for walking capacity only. Common side effects include dizziness, nervousness and nausea, and the incidence of adverse effects was shown to be less than 5% in all studies. Spinal cord injury patients have also seen improvement with 4-AP therapy. These improvements include sensory, motor and pulmonary function, with a decrease in spasticity and pain. Fampridine has had limited clinical use, but has not been linked to serum enzyme elevations during treatment nor to instances of clinically apparent liver injury with jaundice.

* Finerenone is a medication used to reduce the risk of kidney function decline, kidney failure, cardiovascular death, non-fatal heart attacks, and hospitalization for heart failure in adults with chronic kidney disease associated with type 2 diabetes. Finerenone is a non-steroidal mineralocorticoid receptor antagonist (MRA). Common side effects include hyperkalemia (high levels of potassium), hypotension (low blood pressure), and hyponatremia (low levels of sodium). Finerenone has less relative affinity to other steroid hormone receptors than currently available aldosterone antagonists such as eplerenone and spironolactone, which should result in fewer adverse effects like gynaecomastia, impotence, and low libido. Finerenone blocks mineralocorticoid receptors, which makes it a potassium-sparing diuretic. Mineralocorticoid receptor inhibition is responsible for the desired action of the drugs, whereas inhibition of the other receptors potentially leads to side effects. In the Phase II ARTS-DN study, finerenone dose-dependently reduced urine albumin to creatinine ratio in patients with diabetic kidney disease. Based on these findings, finerenone is being studied in the large Phase III FIDELIO and FIGARO outcome studies designed to assess whether finerenone reduces risk of CKD progression and adverse cardiovascular events in patients with Chronic Kidney Disease and Type 2 Diabetes.

* Glibenclamide also known as glyburide, is a medication used to treat diabetes mellitus type 2. It is recommended that it be taken together with diet and exercise. It may be used with other antidiabetic medication. It is not recommended for use by itself in diabetes mellitus type 1. Common side effects include nausea and heartburn. Serious side effects may include angioedema and low blood sugar. It is generally not recommended during pregnancy but can be used during breastfeeding. It is in the sulfonylureas class of medications and works by increasing the release of insulin from the pancreas. It is not as good as either metformin or insulin in those who have gestational diabetes. The medication works by binding to and inhibiting the ATP-sensitive potassium channels (KATP) inhibitory regulatory subunit sulfonylurea receptor 1 (SUR1) in pancreatic beta cells. This inhibition causes cell membrane depolarization, opening voltage-dependent calcium channels. This results in an increase in intracellular calcium in the pancreatic beta cell and subsequent stimulation of insulin release. After a cerebral ischemic insult, the blood–brain barrier is broken and glibenclamide can reach the central nervous system. Glibenclamide has been shown to bind more efficiently to the ischemic hemisphere. Moreover, under ischemic conditions SUR1, the regulatory subunit of the KATP- and the NCCa-ATP-channels, is expressed in neurons, astrocytes, oligodendrocytes, endothelial cells and by reactive microglia. As per the research

papers, this sulphonyl urea drug also has extra hepatic effects. It works by inhibiting the enzyme Carnityl Acyl Transferase I (CAT-I) indirectly which is present in the mitochondria. This prevents the transport of long chain fatty acids into the mitochondria for beta-oxidation. This prevents hyperglycemia for which it is prescribed. Tolbutamine also has a similar effect. Glibenclamide (glyburide) is also a promising neuroprotective agent starting to be tested in spinal cord injury trials, where it showed efficacy in rodent models of ischemic and hemorrhagic stroke, traumatic brain injury, and spinal cord injury by mechanisms including reducing edema formation and secondary hemorrhage.

* GRC-6211 is a TRPV1 blocker that has been shown to reduce the frequency of reflex bladder contractions in rats. GRC-6211 counteracts the bladder hyperactivity and noxious input induced by cystitis. At high doses it suppresses normal bladder activity by a TRPV1 dependent mechanism. TRPV1 antagonists might be useful for cystitis. GRC-6211 acts as a potent and selective antagonist for the TRPV1 receptor. It has analgesic and antiinflammatory effects and reached Phase IIb human trials, but was ultimately discontinued from development as a medicine, though it continues to have applications in scientific research.

* Hyoscyamine is an anticholinergic indicated to treat functional gastrointestinal disorders, biliary and renal colic, and acute rhinitis. Hyoscyamine is a tropane alkaloid and the levo-isomer of atropine used for a wide variety of treatments and therapeutics due to its antimuscarinic properties. As a drug that is not FDA approved, hyscyamine has no official indications. Hysocyamine has been used to reduce gastric motility, reduce pancreatic pain and secretions, treat anticholinesterase toxicity, treat certain cases of partial heart block, to provide symptomatic relief of spasms caused by various lower abdominal and bladder disorders including peptic ulcers, irritable bowel syndrome, diverticulitis, pancreatitis, colic, and interstitial cystitis. It has also been used to relieve some heart problems, control some of the symptoms of Parkinson's disease, as well as for control of abnormal respiratory symptoms and "hyper-mucus secretions" in patients with lung disease. It is also useful in pain control for neuropathic pain, chronic pain and palliative care – "comfort care" – for those with intractable pain from treatment resistant, untreatable, and incurable diseases. and for symptomatic relief of biliary and renal colic, to facilitate intubation, and symptomatic relief of acute rhinitis. Side effects include dry mouth and throat, increased appetite leading to weight gain, eye pain, blurred vision, restlessness, dizziness, arrhythmia, flushing, and faintness. The euphoric and sexual effects are stronger than those of atropine but weaker than those of Hyoscine, as well as dicycloverine, orphenadrine, cyclobenzaprine, trihexyphenidyl, and ethanolamine antihistamines like phenyltoloxamine. Hyoscyamine is an antimuscarinic; i.e., an antagonist of muscarinic acetylcholine receptors. It blocks the action of acetylcholine at parasympathetic sites in sweat glands, salivary glands, stomach secretions, heart muscle, sinoatrial node, smooth muscle in the gastrointestinal tract, and the central nervous system. It increases cardiac output and heart rate, lowers blood pressure and dries secretions. It may antagonize serotonin. At comparable doses, hyoscyamine has 98 per cent of the anticholinergic power of atropine. The other major belladonna-derived drug hyoscine (known in the United States as Scopolamine) has 92 per cent of the antimuscarinic potency of atropine.

* LM22B-10 treatment improved hindlimb function and reduced the development of bladder overactivity and detrusor-sphincter dyssynergia DSD in chronic spinal cord contusion SCC mice that correlated with decreased spinal cord scar volume and secondary injuries. Targeting neurotrophin signalling pathways could hold significant potential as a treatment for neurogenic lower urinary tract LUT dysfunction. Spinal cord injury (SCI), besides resulting in paralysis, can induce lower urinary tract (LUT) dysfunctions that are also highly debilitating and increase morbidity in afflicted individuals. Neurogenic LUT dysfunction includes bladder overactivity, detrusor-sphincter dyssynergia (DSD), urinary retention, frequent urinary tract infections and potential damage to the upper urinary tract. Alterations in neurotrophin signalling has been shown to play a major role in the development of LUT dysfunction.

* Lutein is a xanthophyll and one of 600 known naturally occurring carotenoids. In the human retina, lutein is absorbed from blood specifically into the macula lutea – a small area of the retina responsible for three-color vision – although its precise role in the body is unknown. It filters out potentially phototoxic blue light and near-ultraviolet radiation from the macula. The protective effect is due in part, to the reactive oxygen species quenching ability of these carotenoids. Lutein is one of only two carotenoids that have been identified in the human lens, may be protective against age-related increases in lens density and cataract formation. Again, the possible protection afforded by lutein may be accounted for, in part, by its reactive oxygen species scavenging abilities.

* Magnesium gluconate dihydrate is a magnesium salt of gluconate. It demonstrates the highest oral bioavailability of magnesium salts and is used as a mineral supplement. Magnesium is ubiquitous in the human body, and is naturally present in many foods, added to other food products, available as a dietary supplement and used as an ingredient in some medicines (such as antacids and laxatives). Although magnesium is available in the form of sulphates, lactate, hydroxide, oxide and chloride, only magnesium gluconate is recommended for magnesium supplementation as it appears to be better absorbed and causes less diarrha. This drug has been studied in the prevention of pregnancy-induced hypertension, and has displayed promising results. In addition, it has been studied for its effects on premature uterine contractions. Magnesium gluconate is a mineral supplement which is used to prevent and treat low levels of magnesium. Magnesium is very important for the normal physiologic functioning of cells, nerves, muscles, bones, and the heart. Generally, a well-balanced diet provides the necessary amounts of magnesium for homeostasis. However, certain conditions causing chronic magnesium deficiency may decrease levels of magnesium. These conditions include treatment with diuretics, a poor diet, alcoholism, or other medical conditions (e.g., severe diarrhea/vomiting, stomach/intestinal absorption problems, poorly controlled diabetes).

* Magnesium glycinate is a form of the mineral magnesium that is bound to the amino acid glycine. Glycine increases the bio-availability of magnesium by increasing its absorption in your small intestine, enhancing the uptake of magnesium into your blood

stream. Magnesium glycinate is commonly used to correct a magnesium deficiency, particularly when you may have difficulty absorbing adequate amounts of magnesium due to illness, or if you lack the enzymes that naturally facilitate magnesium absorption and transport. Magnesium may interfere with the absorption of some heart medications, antibiotics, and anti-malarial drugs, which may potentially reduce their efficiency. Drugs used to treat osteoporosis, such as bisphosphonates, should be taken at least several hours apart from magnesium to ensure they won't interfere with one another. Magnesium should not be taken if you are using diuretics, as serious kidney and renal system complications may occur. Magnesium in your body helps maintain proper blood sugar levels by regulating the action of insulin, a hormone that lowers your blood sugar. Insulin in your bloodstream binds to specialized proteins on the surface of your cells, activating these proteins and triggering the uptake of glucose from your bloodstream. Increasing magnesium intake, through food or through supplements, might help maintain healthy magnesium levels in the body and help improve blood sugar control in type 2 diabetics.

* Omigapil has been proved to be safe and well-tolerated in children and adolescents with congenital muscular dystrophy in a Phase I clinical trial. The glyceraldehyde-3-phosphate dehydrogenase nitrosylation inhibitor CGP3466B (omigapil) abrogated Abeta1-42 -induced tau acetylation, spatial memory impairment, and locomotor dysfunction in mice at the dose of 2.5 mg/kg through intraperitoneal (i.p.) injection. Used for tauopathies in neurodegenerative diseases.

* Polidocanol is a local anaesthetic and antipruritic component of ointments and bath additives. It relieves itching caused by eczema and dry skin. It has also been used to treat varicose veins, hemangiomas, and vascular malformations. It is formed by the ethoxylation of dodecanol. Polidocanol is also used as a sclerosant, an irritant injected to treat varicose veins. Polidocanol causes fibrosis inside varicose veins, occluding the lumen of the vessel, and reducing the appearance of the varicosity. Varicose veins develop when the small valves inside the veins no longer work properly, allowing the blood to flow backwards and then pool in the vein.

* Relenopride is a benzamide derivative and a selective serotonin 5-HT4 receptor agonist prokinetic drug used to treat chronic idiopathic constipation. In patients with functional constipation, 10 and 20mg doses accelerated gastric emptying, on per-protocol analysis, and orocecal transit. No significant adverse events were reported.

* Sotradecol (Sodium tetradecyl sulfate). It is commonly used in the treatment of varicose and spider veins of the leg, during the procedure of sclerotherapy. Being a detergent, its action is on the lipid molecules in the cells of the vein wall, causing inflammatory destruction of the internal lining of the vein and thrombus formation eventually leading to sclerosis of the vein. It is occasionally used for the treatment of stabilisation of joints that regularly dislocate, particularly in patients with Ehlers-Danlos syndrome.

* SR-7826-LIMKi3, inhibit contraction of human detrusor strip, and cause actin filament

breakdown, as well as cell proliferation reduction in cultured human bladder smooth muscle cells (HBSMCs), paralleled by reduced cofilin phosphorylation. Silencing of LIMK1 and LIMK2 in HBSMCs resulted in breakdown of actin filaments and decreased cell proliferation. LIM kinases (LIMKs) promote smooth muscle contraction in the prostate and LIMKs may promote contraction and proliferation in the bladder smooth muscle, bladder expressions of LIMKs are elevated in OAB rat detrusor tissues. Overactive bladder (OAB) is the most bothersome symptom in lower urinary tract symptoms (LUTS). Current pharmacologic treatment aims to inhibit detrusor contraction; however, shows unsatisfied efficacy and high discontinuation rate. LIMK inhibitors could be a potential therapeutic strategy for overactive bladder -related lower urinary tract symptoms. (doi: 10.1016/j.apsb.2021.01.005)

* Voglibose is an alpha-glucosidase inhibitor used for lowering postprandial blood glucose levels in people with diabetes mellitus. Voglibose delays the absorption of glucose thereby reducing the risk of macrovascular complications. Voglibose is a research product of Takeda Pharmaceutical Company, Japan's largest pharmaceutical company. Vogilbose was discovered in 1981, and was first launched in Japan in 1994, under the trade name BASEN, to improve postprandial hyperglycemia in diabetes mellitus. Postprandial hyperglycemia (PPHG) is primarily due to first phase insulin secretion. Alpha glucosidase inhibitors delay glucose absorption at the intestine level and thereby prevent sudden surge of glucose after a meal. There are three major drugs which belong to this class, acarbose, miglitol and voglibose, of which voglibose is the newest.

1.3.1.44 RT-MB-56

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3F1; Activated Charcoal; ADX71441; Alaproclate; Anakinra; Aviptadil; Baloxavir marboxil; BMS-986020; Candesartan; Carnitine; Ceftaroline fosamil; Ceftolozane-Tazobactam; Cilengitide; Colloidal Silver; Compound-44; CTIBD; Insulin; Montbretin A; Nemonoxacin; Nifedipine; Pexiganan; PIEZO2 Factor; Reldesemtiv; Salvigenin; Solabegron; Solifenacin; Tamsulosin; Tozinameran; Trichloroacetic acid; Turmeric-Mix

* 3F1 treatment effectively prevented dental caries by controlling S. mutans in a rat caries model without perturbing the oral microbiota. At 5 micromolars (μM)] , the small molecule annotated 3F1 dispersed 50% of the established S. mutans biofilm but did not disperse biofilms formed by the commensal species Streptococcus sanguinis or Streptococcus gordonii. 3F1 dispersed S. mutans biofilms independently of biofilm-related factors such as antigen I/II and glucosyltransferases. 3F1 was able to effectively reduce dental caries in vivo without affecting the overall oral microbiota shaped by the intake of dietary sugars, suggesting that the pathogenic biofilm-specific treatment is a viable strategy for disease prevention. Streptococcus mutans metabolizes sucrose to initiate biofilm formation on the tooth surface and consequently produces lactic acid to degrade the tooth’s en

amel. Persistence of S. mutans biofilms in the oral cavity can lead to tooth decay.

* Activated Charcoal also known as activated carbon, is a medication used to treat poisonings that occurred by mouth. To be effective it must be used within a short time of the poisoning occurring, typically an hour. It does not work for poisonings by cyanide, corrosive agents, iron, lithium, alcohols, or malathion. Other uses include inside hemoperfusion machines. Common side effects include vomiting, black stools, diarrhea, and constipation. The more serious side effect, pneumonitis, may result if aspirated into the lungs. Gastrointestinal obstruction and ileus are less common but serious adverse effects. Use in pregnancy and breastfeeding is safe. Activated charcoal works by adsorbing the toxin. While charcoal has been used since ancient times for poisonings, activated charcoal has been used since the 1900s. It is on the World Health Organization's List of Essential Medicines. Activated charcoal is used to treat many types of oral poisonings such as phenobarbital and carbamazepine. It is not effective for a number of poisonings including: strong acids or bases, iron, lithium, arsenic, methanol, ethanol or ethylene glycol. Although activated charcoal is the most commonly used agent for GI decontamination in poisoned patients, medical professionals use discretion when determining whether or not its use is indicated. In a study of acute poisonings from agricultural pesticides and yellow oleander seeds, the administration of activated carbon did not affect survival rates.

* ADX71441 is a novel, potent and selective GABAB positive allosteric modulator PAM. In rodent trials caused significant reductions in alcohol intake (up to 65% with the highest dose of 200mg/kg). The drug potently reduced motivation to drink and alcohol-seeking behaviours, suggesting inhibition of alcohol-induced dopamine response and therefore reduced addiction. ADX71441 also caused a significant reduction in alcohol-seeking caused by alcohol-predictive environments and exposure to a stress, suggesting therapeutic use in preventing alcohol use disorder relapse as more than 50% of patients relapse in only 3 months. Preclinical studies suggest the superiority of GABAB PAMs in terms of efficacy to side effects. ADX71441 is an experimental therapy with the potential to slow the progression of nerve damage in people who have Charcot-Marie-Tooth disease, or CMT. Some people with CMT have an extra copy of a gene that codes for peripheral myelin protein 22, or PMP22. PMP22 is necessary for the production of myelin, an insulating layer around nerve cells that promotes the transmission of nerve signals. Too much PMP22 gums up the works, however, ultimately causing the nerve damage associated with CMT. One strategy for slowing the damage is decreasing the amount of PMP22 in nerve cells. Gamma-aminobutyric acid, or GABA, inhibits nerve signal transmission. It does this by reducing the activity of nerve cells when it binds to its GABA receptor. Scientists think that the activation of GABA-B receptors reduces the PMP22 gene’s production of myelin protein. ADX71441 is designed to modify the activity of GABA-B receptors to reduce the protein’s production. ADX71441 reduced the signs of bladder overactivity in both models of OAB, suggesting that the GABAB PAM approach has potential for the pharmacological treatment of OAB. Overactive bladder (OAB) is a common, chronic and debilitating disorder characterized by urinary urgency often accompanied by incontinence (involuntary urine leakage), frequency (≥8 micturition in 24 h) and nocturia (≥1 awakening per night to void). The GABAB receptor agonist baclofen reduces urethral resistance and detrusor overactivity in patients with spasticity. However, baclofen's side effects limit its

use for the treatment of overactive bladder (OAB). ADX71441 showed efficacy in the marble burying and elevated plus maze tests relevant for anxiety-like supporting and expanding earlier evidence of the broad anxiolytic-like properties of the target. Acute ADX71441 reduced visceral pain in the acetic acid (AA) writhing test and also reduced chronic pain in the monosodium iodoacetate (MIA)-induced model of osteoarthritis, after acute and subchronic administration regimens.

* Alaproclate (A03), a known selective serotonin reuptake inhibitor, induced dose-response increases of neuroprotective SirT1 in N2a cells stably expressing full-length ApoE4 with an EC 50 of 2mM. Moreover, A03 increased SirT1 levels in ApoE4-transfected human A172 glioblastoma cells. In 5XFAD-ApoE4 AD model mice, subcutaneous administration of A03 (10 mg/kg/day) for 56 days increased SirT1 levels in the hippocampus and elicited cognitive improvement while inducing no observed toxicity. In addition, pharmacokinetic study shows that A03 is orally bioavailable and brainpenetrant. The SirT1 enhancing effects of A03 may decrease acetylated tau levels and abrogate tau pathology, which needs direct evidence in the future studies. Used for tauopathies in neurodegenerative diseases.

* Anakinra is a biopharmaceutical medication used to treat rheumatoid arthritis, cryopyrin-associated periodic syndromes, familial Mediterranean fever, and Still's disease. It is a recombinant and slightly modified version of the human interleukin 1 receptor antagonist protein. Anakinra is administered by subcutaneous injection. It is used as a second line treatment to manage symptoms of rheumatoid arthritis after treatment with a disease-modifying antirheumatic drug (DMARD) has failed. It can be used in combination with some DMARDs. It is used to treat anyone from infants to adults with a cryopyrin-associated periodic syndrome, including neonatal-onset multisystem inflammatory disease. It also appears to be effective in treating macrophage activation syndrome (MAS), a form of cytokine storm. It is used off label to treat Schnitzler's syndrome. It has been shown to help treat secondary hemophagocytic lymphohistiocytosis (HLH) especially in pediatric patients with other rheumatological disorders. It was not tested in pregnant women, but appeared to be safe in animal studies. It should not be used in people who have active infections or latent tuberculosis, who have low white blood cells counts, or who are taking TNF inhibitors. More than ten percent of people taking Anakinra have injection site reactions, headaches, and have increased levels of cholesterol in their blood. Between one and ten percent of people have severe infections, decreased white blood cells, or decreased platelets. It is unclear if taking Anakinra increases the risk of getting cancer; studies are complicated by the fact that people with rheumatoid arthritis are already at higher risk of getting cancer. Anakinra is associated with a low rate of serum enzyme elevations during therapy and with rare instances of clinically apparent, acute liver injury. It was approved in 2020, for the treatment of patients with deficiency of interleukin-1 receptor antagonist, a very rare genetic inflammatory condition resembling an infection throughout the body or a bone infection that happens in newborns during the first days of life.

* Aviptadil (RLF 100, DK 1000) is an injectable synthetic formulation of human

vasoactive intestinal peptide (VIP). VIP was discovered in 1970, and has been used to treat various inflammatory conditions, such as acute respiratory distress syndrome (ARDS), asthma and chronic obstructive pulmonary disease (COPD). Studies have found that aviptadil may be beneficial for severely ill patients with COVID-19 related ARDS. COVID-19-related death is primarily caused by Acute Respiratory Distress Syndrome (ARDS). The trigger for ARDS is widely attributed to a cytokine storm in the lungs, in which the virus causes release of inflammatory cytokines. As a result, alveolae of the lungs fill with fluid and become impermeable to oxygen, even in the setting of mechanical ventilation. SARS-CoV-2 is known to cause respiratory failure, which is the hallmark of Acute COVID-19. Undesirable effects: Gastrointestinal Disorders – Diarrhea, Vascular disorders – Hypotension, cutaneous flushing, facial flushing & Infusion related reactions.

* Baloxavir marboxil is an antiviral medication for treatment of influenza A and influenza B flu. It was approved for medical use both in Japan and in the United States in 2018, Baloxavir marboxil was developed as a prodrug strategy, with its metabolism releasing the active agent, baloxavir acid (BXA). BXA then functions as enzyme inhibitor, targeting the influenza virus' cap-dependent endonuclease activity, used in "cap snatching" by the virus' polymerase complex, a process essential to its life-cycle. The most common side effects of baloxavir marboxil include diarrhea, bronchitis, nausea, sinusitis and headache. Baloxavir marboxil is an influenza medication, an antiviral, for individuals who are twelve years of age or older, that have presented symptoms of this infection for no more than 48 hours. The efficacy of baloxavir marboxil administered after 48 hours has not been tested. Baloxavir marboxil is an influenza medication, an antiviral, for individuals who are twelve years of age or older, that have presented symptoms of this infection for no more than 48 hours. In November 2020, the FDA approved an updated indication to include post-exposure prevention of influenza (flu) for people twelve years of age and older after contact with an individual who has the flu. In October 2019, the FDA approved an updated indication for the treatment of acute, uncomplicated influenza in people twelve years of age and older at risk of influenza complications. Baloxavir marboxil should not be co-administered with dairy products, calcium-fortified beverages, or laxatives, antacids, or oral supplements containing calcium, iron, magnesium, selenium, aluminum or zinc.

* BMS-986020, also known as AM152 and AP-3152 free acid, is a potent and selective LPA1 antagonist. BMS-986020 is in Phase 2 clinical development for treating idiopathic pulmonary fibrosis. BMS-986020 selectively inhibits the LPA receptor, which is involved in binding of the signaling molecule lysophosphatidic acid, which in turn is involved in a host of diverse biological functions like cell proliferation, platelet aggregation, smooth muscle contraction, chemotaxis, and tumor cell invasion, among others. The lysophosphatidic acid receptor, LPA1, has been implicated as a therapeutic target for fibrotic disorders. Lysophospholipids (LPs), including lysophosphatidic acid (LPA), sphingosine 1-phospate (S1P), lysophosphatidylinositol (LPI), and lysophosphatidylserine (LysoPS), are bioactive lipids that transduce signals through their specific cell-surface G protein-coupled receptors, LPA1-6, S1P1-5, LPI1, and LysoPS1-3, respectively. These LPs and their receptors have been implicated in both

physiological and pathophysiological processes such as autoimmune diseases, neurodegenerative diseases, fibrosis, pain, cancer, inflammation, metabolic syndrome, bone formation, fertility, organismal development, and other effects on most organ systems.

* Candesartan is an angiotensin-receptor blocker (ARB) that may be used alone or with other agents to treat hypertension. It is administered orally as the prodrug, candesartan cilexetil, which is rapidly converted to its active metabolite, candesartan, during absorption in the gastrointestinal tract. Candesartan lowers blood pressure by antagonizing the renin-angiotensin-aldosterone system (RAAS); it competes with angiotensin II for binding to the type-1 angiotensin II receptor (AT1) subtype and prevents the blood pressure increasing effects of angiotensin II. Unlike angiotensin-converting enzyme (ACE) inhibitors, ARBs do not have the adverse effect of dry cough. Candesartan may be used to treat hypertension, isolated systolic hypertension, left ventricular hypertrophy and diabetic nephropathy. It may also be used as an alternative agent for the treatment of heart failure, systolic dysfunction, myocardial infarction and coronary artery disease. As with other drugs that inhibit the renin–angiotensin system, if candesartan is taken by pregnant women during the second or third trimester, it can cause injury and in some cases, death of the developing fetus. Symptomatic hypotension may occur in people who take candesartan and are volume-depleted or salt-depleted, as can also occur when diuretics are coadministered. Reduction in renal glomerular filtration rate may occur; people with renal artery stenosis may be at higher risk. Hyperkalemia may occur; people who are also taking spironolactone or eplerenone may be at higher risk. Anemia may occur, due to inhibition of the renin–angiotensin system. As with other angiotensin receptor blockers, candesartan can rarely cause severe liver injury. Candesartan, reduces methamphetamine (METH) use disorder, in conjunction with the counter-regulation of Dopamine 2 Receptor (D2R) and Angiotensin II receptor type 1 (AT1R.)

* Carnitine is a quaternary ammonium compound involved in metabolism in most mammals, plants, and some bacteria. In support of energy metabolism, carnitine transports long-chain fatty acids into mitochondria to be oxidized for energy production, and also participates in removing products of metabolism from cells. Given its key metabolic roles, carnitine is concentrated in tissues like skeletal and cardiac muscle that metabolize fatty acids as an energy source. Healthy individuals, including strict vegetarians, synthesize enough L-carnitine in vivo to not require supplementation. Carnitine exists as one of two stereoisomers (the two enantiomers d-carnitine (S-(+)-) and l-carnitine (R-(-)-)). Both are biologically active, but only l-carnitine naturally occurs in animals, and d-carnitine is toxic as it inhibits the activity of the l-form. At room temperature, pure carnitine is a white powder, and a water-soluble zwitterion with low toxicity. Derived from amino acids, carnitine was first extracted from meat extracts in 1905, leading to its name from Latin, "caro/carnis" or flesh.

* Ceftaroline fosamil is a cephalosporin antibiotic with anti-MRSA activity. Ceftaroline fosamil is a prodrug of ceftaroline. It is active against methicillin-resistant Staphylococcus aureus (MRSA) and other Gram-positive bacteria. It retains some

activity of later-generation cephalosporins having broad-spectrum activity against Gram-negative bacteria, but its effectiveness is relatively much weaker. It is currently being investigated for community-acquired pneumonia and complicated skin and skin structure infection. Uncomplicated SSSIs included "simple abscesses, impetiginous lesions, furuncles, and cellulitis." Complicated SSSIs included "infections either involving deeper soft tissue or requiring significant surgical intervention, such as infected ulcers, burns, and major abscesses or a significant underlying disease state that complicates the response to treatment." The FDA further noted that "superficial infections or abscesses in an anatomical site, such as the rectal area, where the risk of anaerobic or Gram-negative pathogen involvement is higher, [were also] considered complicated infections."The uncomplicated category (uSSSI) is most frequently caused by Staphylococcus aureus and Streptococcus pyogenes, whereas the complicated category (cSSSI) might also be caused by a number of other pathogens. The clinical studies indicated ceftaroline was well tolerated. The most common adverse reactions occurring in > 2% of subjects receiving ceftaroline in the pooled phase-III clinical trials were diarrhea, nausea, and rash. The warnings and precautions associated with ceftaroline include: Known serious hypersensitivity to ceftaroline or other members of the cephalosporin class. Anaphylaxis and anaphylactoid reactions. Clostridium difficile-associated diarrhea (CDAD) has been reported for nearly all antibacterial agents including ceftaroline, and may range in severity from mild diarrhea to fatal colitis. Prescribing ceftaroline in the absence of a proven or strongly suspected bacterial infection is unlikely to provide benefit to the patient and increases the risk of the development of drug-resistant bacteria. In the pooled phase-III CABP trials, 51/520 (9.8%) of subjects treated with ceftaroline compared to 24/534 (4.5%) of subjects treated with ceftriaxone seroconverted from a negative to a positive direct Coombs' test result. No clinical adverse reactions representing hemolytic anemia were reported in any treatment group. If anemia develops during or after treatment with ceftaroline, drug-induced hemolytic anemia should be considered. If drug-induced hemolytic anemia is suspected, discontinuation of ceftaroline should be considered and supportive care should be administered to the patient if clinically indicated. No clinical drug-drug interaction studies have been conducted with ceftaroline fosamil. In vitro studies in human liver microsomes indicated that neither ceftaroline fosamil nor ceftaroline inhibits the major cytochrome P450 isoenzymes. Therefore, neither ceftaroline fosamil nor ceftaroline is expected to inhibit or induce the clearance of drugs that are metabolized by these metabolic pathways in a clinically relevant manner. For pregnant or nursing mothers, ceftaroline fosamil should be used only if the potential benefit outweighs the potential risk to the fetus or child. Safety and effectiveness in pediatric children has not been studied. Because elderly people 65 years of age or older are more likely to have decreased renal function and ceftaroline is excreted primarily by the kidney, care should be taken in dose selection in this age group as in younger people with impaired renal function. Dosage adjustment is required in people with moderately (30 to ‰¤ 50 mL/min) or severely (< 30 mL/min) impaired renal function. The pharmacokinetics of ceftaroline in people with hepatic impairment have not been established. No adverse reactions occurred in greater than 5% of people receiving ceftaroline.

* Ceftolozane-Tazobactam is a combination antibiotic medication used for the treatment

of complicated urinary tract infections and complicated intra-abdominal infections in adults. Ceftolozane is a antibiotic, developed for the treatment of infections with gram-negative bacteria that are resistant to conventional antibiotics. It was studied for urinary tract infections, intra-abdominal infections and ventilator-associated bacterial pneumonia. The most common side effects include nausea (feeling sick), headache, constipation, diarrhea and fever. Ceftolozane is a type of antibiotic called a cephalosporin, which belongs to the wider group of antibiotics called beta-lactams. It works by interfering with the production of molecules that bacteria need to build their protective cell walls. This causes weakness in the bacterial cell walls which then become prone to collapse, ultimately leading to the death of the bacteria. Tazobactam blocks the action of bacterial enzymes called beta-lactamases. These enzymes enable bacteria to break down beta-lactam antibiotics like ceftolozane, making the bacteria resistant to the antibiotic's action. By blocking the action of these enzymes, tazobactam allows ceftolozane to act against bacteria that would otherwise be resistant to ceftolozane. Ceftolozane/tazobactam is indicated for the treatment of the following infections in adults caused by designated susceptible microorganisms: Complicated intra-abdominal infections; Acute pyelonephritis; Complicated urinary tract infections. Hospital-acquired bacterial pneumonia and Ventilator-associated bacterial pneumonia (HABP/VABP).

* Cilengitide (EMD 121974) is a molecule based on the cyclic peptide cyclo(-RGDfV-), which is selective for alphav integrins, which are important in angiogenesis (forming new blood vessels), and other aspects of tumor biology. Hence, it is under investigation for the treatment of glioblastoma, where it may act by inhibiting angiogenesis, and influencing tumor invasion and proliferation. The European Medicines Agency has granted cilengitide orphan drug status. Cilengitide seems to function by inhibiting the FAK/src/AKT pathway and inducing apoptosis in endothelial cells. Preclinical studies in mice of cilengitide were able to demonstrate efficacious tumor regression. In a rat xenograft model, cilengitide was able to potentiate the cytotoxic effects of radiation when cilengitide was administered prior to radiation therapy. When combined with radiation, inhibition of integrin expression by cilengitide synergistically improves the cytotoxic effects of ionizing radiation for glioblastoma. Phase II studies were able to demonstrate that cilengitide as a potential monotherapy in patients with recurrent glioblastoma with high intratumor drug levels when 2000 mg of cilengitide is given twice weekly. Cilengitide is well tolerated, in combination with radiation and temozolomide, at a dose of 2000 mg in patients with newly diagnosed glioblastoma, regardless of MGMT promoter status. In a phase I/IIa study, the addition of cilengitide to the standard of care for newly diagnosed glioblastoma (surgical resection followed by temozolomide and radiation therapy) improves progression-free survival and overall survival in patients with MGMT promoter methylation.

* Colloidal Silver. Silver(1+) is a silver cation, a monovalent inorganic cation, a monoatomic monocation and an elemental silver. The medical uses of silver include its use in wound dressings, creams, and as an antibiotic coating on medical devices. Wound dressings containing silver sulfadiazine or silver nanomaterials may be used to treat external infections. The limited evidence available shows that silver coatings on

endotracheal breathing tubes may reduce the incidence of ventilator-associated pneumonia. There is tentative evidence that using silver-alloy indwelling catheters for short-term catheterizing will reduce the risk of catheter-acquired urinary tract infections. Indicated for Dental Pulp Necrosis (Phase 4); Diabetic Foot (Phase 4); Foot Ulcer (Phase 4); Pain, Postoperative (Phase 4); Skin Ulcer; Ulcer (Phase 4.); Sinusitis (Phase 2) Hernia (Phase 1); Hernia, Abdominal (Phase 1); Hernia, Ventral (Phase 1); Incisional Hernia (Phase 1); Chronic Disease (Phase 1).

* Compound-44 is a tricyclic peptide PCSK9 inhibitor. Proprotein convertase subtilisin-like/kexin type 9 (PCSK9) is a key regulator of plasma LDL-cholesterol (LDL-C) and a clinically validated target for the treatment of hypercholesterolemia and coronary artery disease. This molecule represents the first report of highly potent and orally bioavailable macrocyclic peptide PCSK9 inhibitor with an overall favorable profile as a once-daily oral lipid-lowering agent. The clearance of the molecule has been shifted over time in the drug discovery campaign from predominantly hepatic to renal by reducing OATP 1B1 transporter activity.

* CTIBD or 4-(4-(4-chlorophenyl)-3-(trifluoromethyl)isoxazol-5-yl)benzene-1,3-diol and its derivatives are novel chemical activators of the bladder BKCa channel and potential candidates for OAB therapeutics. CTIBD directly activates the BKCa channel and relaxes urinary bladder smooth muscle of rats. In an acetic acid-induced overactive bladder (OAB) model, intraperitoneal injection of 20 mg/kg CTIBD effectively restored frequent voiding contraction and lowered voiding volume without affecting other bladder function parameters. CTIBD concentration-dependently reduced acetylcholine-induced contraction of urinary bladder smooth muscle strips. CTIBD altered the gating kinetics of the channel by dramatically slowing channel closing without effecting channel opening. When CTIBD was applied to the treated extracellular side of the channel, the conductance-voltage relationship of the channel shifted toward a negative value, and the maximum conductance increased in a concentration-dependent manner. The large-conductance calcium-activated potassium channel (BKCa channel) is expressed on various tissues and is involved in smooth muscle relaxation. The channel is highly expressed on urinary bladder smooth muscle cells and regulates the repolarization phase of the spontaneous action potentials that control muscle contraction.

* Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver. Insulin is a peptide hormone produced by beta cells of the pancreatic islets; it is considered to be the main anabolic hormone of the body. It regulates the metabolism of carbohydrates, fats and protein by promoting the absorption of glucose from the blood into liver, fat and skeletal muscle cells. In these tissues the absorbed glucose is converted into either glycogen via glycogenesis or fats (triglycerides) via lipogenesis, or, in the case of the liver, into both.[8] Glucose production and secretion by the liver is strongly inhibited by high concentrations of insulin in the blood. Circulating insulin also affects the synthesis of proteins in a wide variety of tissues. It is therefore an anabolic hormone, promoting the conversion of small molecules in the blood into large molecules inside the cells. Low insulin levels in the

blood have the opposite effect by promoting widespread catabolism, especially of reserve body fat. Beta cells are sensitive to blood sugar levels so that they secrete insulin into the blood in response to high level of glucose; and inhibit secretion of insulin when glucose levels are low. Insulin enhances glucose uptake and metabolism in the cells, thereby reducing blood sugar level. Their neighboring alpha cells, by taking their cues from the beta cells, secrete glucagon into the blood in the opposite manner: increased secretion when blood glucose is low, and decreased secretion when glucose concentrations are high. Glucagon increases blood glucose level by stimulating glycogenolysis and gluconeogenesis in the liver. The secretion of insulin and glucagon into the blood in response to the blood glucose concentration is the primary mechanism of glucose homeostasis. Decreased or absent insulin activity results in diabetes mellitus, a condition of high blood sugar level (hyperglycaemia). There are two types of the disease. In diabetes mellitus type 1, the beta cells are destroyed by an autoimmune reaction so that insulin can no longer be synthesized or be secreted into the blood. In diabetes mellitus type 2, the destruction of beta cells is less pronounced than in type 1, and is not due to an autoimmune process. Instead, there is an accumulation of amyloid in the pancreatic islets, which likely disrupts their anatomy and physiology. The pathogenesis of type 2 diabetes is not well understood but reduced population of islet beta-cells, reduced secretory function of islet beta-cells that survive, and peripheral tissue insulin resistance are known to be involved. Type 2 diabetes is characterized by increased glucagon secretion which is unaffected by, and unresponsive to the concentration of blood glucose. But insulin is still secreted into the blood in response to the blood glucose. As a result, glucose accumulates in the blood.

* Montbretin A is a new anti-diabetic compound derived from a garden flower approved by Health Canada for Phase 1 human trials. Montbretin A slows down the degradation of the starch component in food, but does not affect the simple sugars. Montbretin A (MbA) works by inhibiting the enzyme alpha-amylase. When MbA inhibits the alpha-amylase enzyme, starch doesn't break down immediately and instead travels down into the lower gut. Normally, the alpha-amylase enzyme breaks down starch from foods such as rice and bread into complex sugars called oligosaccharides. Oligosaccharides are then further degraded by alpha-glucosidase enzymes in the gut wall, releasing glucose into the bloodstream, which causes blood sugar levels to spike in Type 2 diabetics. Current drugs that target the same enzyme system usually inhibit the alpha-glucosidase enzyme, stopping the oligosaccharides or complex sugars from being broken down, and preventing the release of glucose. The downside of these drugs is that the oligosaccharides that are shunted down provide 'fast food' for the gut bacteria further down, and these gut bacteria produce a lot of gas as a side product…so the patient tends to suffer from diarrhea and flatulence. Since MbA prevents starch from being broken down into oligosaccharides, the full starch polymer will make its way into the lower gut. The bacteria down there can degrade that, although more slowly. Animal studies on diabetic rats showed that MbA controlled blood sugar levels efficiently.

* Nemonoxacin is a non-fluorinated quinolone antibiotic undergoing clinical trials. It has the same mechanism of action as fluouroquinolones; it inhibits DNA gyrase, preventing DNA synthesis, gene duplication, and cell division. The U.S. Food and Drug

Administration (FDA) has granted nemonoxacin qualified infectious disease product (QIDP) and fast track designations for community-acquired bacterial pneumonia (CAP) and acute bacterial skin and skin-structure infections (ABSSSI). Nemonoxacin has a broad spectrum of activity against Gram-positive, Gram-negative, and atypical pathogens, including activity against methicillin-resistant Staphylococcus aureus (MRSA) (MIC90 1 g/ml) and vancomycin-resistant pathogens. However, it was less active against Gram-negative pathogens such as Escherichia coli, Proteus mirabilis, and Pseudomonas aeruginosa, with MIC90 values of 32, 16, and 32 g/ml, respectively. The new drug also is effective against C.difficile isolates that are resistant to other quinolones, and is more potent than levofloxacin or moxifloxacin.

* Nifedipine is a calcium channel blocker medication used to manage angina, high blood pressure, Raynaud's phenomenon, and premature labor. It is one of the treatments of choice for Prinzmetal angina. It may be used to treat severe high blood pressure in pregnancy. Its use in preterm labor may allow more time for steroids to improve the baby's lung function and provide time for transfer of the mother to a well qualified medical facility before delivery. It is a calcium channel blocker of the dihydropyridine type. Nifedipine is taken by mouth and comes in fast- and slow-release formulations. Common side effects include lightheadedness, headache, feeling tired, leg swelling, cough, and shortness of breath. Serious side effects may include low blood pressure and heart failure. There is tentative evidence that its use in pregnancy is safe; however, it is not recommended during breastfeeding. The approved uses are for the long-term treatment of hypertension and angina pectoris. In hypertension, recent clinical guidelines generally favour diuretics and ACE inhibitors, although calcium channel antagonists, along with thiazide diuretics, are still favoured as primary treatment for patients over 55 and black patients. Nifedipine has been used frequently as a tocolytic (agent that delays premature labor). A Cochrane review has concluded that it has benefits over placebo or no treatment for prolongation of pregnancy. It also has benefits over beta-agonists and may also have some benefits over atosiban and magnesium sulfate, although atosiban results in fewer maternal adverse effects. No difference was found in the rate of deaths among babies around the time of birth, while data on longer-term outcomes is lacking. Raynaud's phenomenon is often treated with nifedipine. A 2005 meta-analysis showed modest benefits (33% decrease in attack severity, 2.8-5 reduction in absolute number of attacks per week); it does conclude that most included studies used low doses of nifedipine. Topical nifedipine has been shown to be as effective as topical nitrates for anal fissures. Nifedipine is also used in high-altitude medicine to treat high altitude pulmonary edema. Nifedipine is one of the main choices for the treatment of Prinzmetal angina due to its vasodilating effects on the coronary arteries. Other uses include painful spasms of the esophagus such as from cancer or tetanus. It is also used for the small subset of people with pulmonary hypertension.Finally, nifedipine can be used in the treatment of renal calculi, which are commonly referred to as kidney stones. Studies have indicated that it helps to relieve renal colic. However, alpha blockers (such as tamsulosin) have been described as being significantly better. Nifedipine treats chilblains by helping to dilate blood vessels and improve circulation. Side effects can include flushing of the face and neck, nausea, dizziness, and swelling in the hands or feet. Nifedipine rapidly lowers blood pressure,

and patients are commonly warned they may feel dizzy or faint after taking the first few doses. Tachycardia (fast heart rate) may occur as a reaction. Patients are warned not to consume anything containing grapefruit or grapefruit juice, as they raise blood nifedipine levels. There are several possible mechanisms, including the inhibition of CYP3A4-mediated metabolism. As calcium channel blocker, nifedipine has a risk of causing gingival hyperplasia. Nifedipine is a calcium channel blocker. Although nifedipine and other dihydropyridines are commonly regarded as specific to the L-type calcium channel, they also possess nonspecific activity towards other voltage-dependent calcium channels. Nifedipine has additionally been found to act as an antagonist of the mineralocorticoid receptor, or as an antimineralocorticoid.

* Pexiganan is a polypeptide antibiotic agent derivative of Magainin. Pexiganan is a microbicide and antiinfective agent with potent and broad-spectrum antimicrobial with low toxicity against mammalian cells. It is being developed as a topical therapy for infected foot ulcers in patients with diabetes. Pexiganan is a 22-amino-acid antimicrobial peptide derived from magainin peptides isolated from the skin of the African clawed frog. It demonstrates antimicrobial activity against a broad range of organisms, including gram-positive aerobes and anaerobes, such as staphylococcus, streptococcus, enterococcus, corynebacterium, pseudomonas, acinetobacter, strenotrophomonas, bacteroides, and other species. Phase III clinical studies proved pexiganan to be efficient in wound healing, with few reports of toxicity.

* PIEZO2 Factor or Piezo-type mechanosensitive ion channel component 2 is a protein that in humans is encoded by the PIEZO2 gene. The PIEZO2 protein has a role in rapidly adapting mechanically activated (MA) currents in somatosensory neurons. PIEZO2 is typically found in tissues that respond to physical touch, such as Merkel cells, and is thought to regulate light touch response. PIEZO2, may be responsible for the powerful urge to urinate that we normally feel several times a day. This gene helps at least two different types of cells in the body sense when our bladders are full and need to be emptied. Gain-of-function mutations in the mechanically activated ion channel PIEZO2 cause a subtype of Distal Arthrogryposis. Mice without PIEZO2 in their proprioceptive neurons show uncoordinated body movements, indicating that PIEZO2 plays a role in mammalian proprioception. PIEZO2 mutations link Gordon syndrome (distal arthrogryposis type 3), Marden-Walker syndrome and Arthrogryposis (Distal Arthrogryposis Type 5).

* Reldesemtiv (CK-2127107) is an activator of skeletal muscle troponin, a calcium-sensitive sarcomere protein. By slowing the rate of calcium release in skeletal muscles, it improves their contractility. Several trials realized in healthy volunteers against placebo have showed its good tolerance and its effectiveness on muscle strength; it is being studied as a potential treatment for diseases associated with fatigue or muscle weakness. Developed by Cytokinetics, reldesemtiv was evaluated between December 2015 and May 2018 in 18 centers in North America in 70 patients with type II, III and IV SMA, over 12 years-old. For two months, participants in this phase II, randomized, double-blind trial received orally either reldesemtiv twice daily at a dose of 150 mg (24 participants) or 450 mg (20 participants), or placebo (26 participants). The results,

published in February 2021, show: good tolerance to the two doses tested, a significant improvement in respiratory function (maximum expiratory pressure or MEP) in patients on reldesemtiv at both doses, compared to the placebo group, a significant increase in the walking distance covered in six minutes by the patients who received reldesemtiv 450 mg compared to the placebo group. The investigators of this trial suggest to evaluate this treatment, which does not affect the production of SNM like the drugs recently authorized in SMA, in a larger number of patients. Despite the recent approvals of edaravone for the treatment of amyotrophic lateral sclerosis (ALS) and nusinersen for the treatment of spinal muscle atrophy (SMA), therapeutic options remain limited and represent a significant medical need. The discovery of reldesemtiv, a second-generation fast skeletal muscle troponin activator (FSTA) that increases force production at submaximal stimulation frequencies, is reported. Property-based optimization of high throughput screening hit 1 led to compounds with improved free exposure and in vivo muscle activation potency compared to the first-generation FSTA, tirasemtiv. Reldesemtiv demonstrated increased muscle force generation in a phase 1 clinical trial and is currently being evaluated in clinical trials for the treatment of amyotrophic lateral sclerosis.

* Salvigenin is a natural polyphenolic compound, with neuroprotective effect. Salvigenin, a potent human monoamine oxidase-A -hMAO-A isoform inhibitor, has antitumor cytotoxic and immunomodulatory properties. Salvigenin has dose-dependent analgesic effect so that it can be useful in controlling of inflammations, acute and chronic pain. Salvigenin has been found to have cytotoxic effects on various forms of cancer cells, such as colon adenocarcinoma, breast adenocarcinoma and glioblastoma. Further salvigenin has beneficial potential in the medicine for the treatment of diabetes and protects cells against oxidative stress.

* Solabegron is a drug which acts as a selective agonist for the beta3 adrenergic receptor. It is being developed for the treatment of overactive bladder and irritable bowel syndrome. It has been shown to produce visceral analgesia by releasing somatostatin from adipocytes. Solabegron relaxes the bladder smooth muscle by stimulating beta3 adrenoceptors, a novel mechanism compared with older established drug treatments for overactive bladder syndrome such as the anticholinergic agents. Astellas Pharma has developed the first commercially available beta3 adrenergic receptor, mirabegron, which is now licensed in Japan and the U.S. exclusively for treatment of overactive bladder syndrome. A Phase II study of solabegron for overactive bladder (OAB) looked at 258 patients with moderate-to-severe incontinence experiencing an average of 4.5 wet episodes per day. Results demonstrated a statistically significant improvement with solabegron as compared with placebo, as measured by the percentage reduction of the number of wet episodes and the absolute number of daily voids. A Phase II study for irritable bowel syndrome (IBS) evaluated 102 patients with IBS. Solabegron demonstrated significant reduction in pain associated with the disorder and a trend for greater improvement in the quality of life, when compared with a placebo. Both Phase II studies indicated a tolerability profile for Solabegron that was similar to placebo. The OAB patients did not suffer from dry mouth, constipation, increase in heart rate or cognitive issues. This drug does not bind to acetylcholine receptors so side effects are

expected to be minor.

* Solifenacin is a medicine used to treat overactive bladder and neurogenic detrusor overactivity (NDO). It may help with incontinence, urinary frequency, and urinary urgency. Benefits appear similar to other medications in the class. Common side effects include dry mouth, constipation, and urinary tract infection. Severe side effects may include urinary retention, QT prolongation, hallucinations, glaucoma, and anaphylaxis. It is unclear if use is safe during pregnancy. It is of the antimuscarinic class and works by decreasing bladder contractions. It is used to treat overactive bladder. It may help with incontinence, urinary frequency, and urinary urgency. Benefits appear similar to other antimuscarinics such as oxybutynin, tolterodine, and darifenacin. It is also used to treat neurogenic detrusor overactivity (NDO), a form of bladder dysfunction related to neurological impairment, in children ages two years and older. NDO is a dysfunction of the bladder that results from disease or injury in the nervous system. With NDO, there is overactivity of the bladder wall muscle, which normally relaxes to allow storage of urine. The bladder wall muscle overactivity results in sporadic bladder muscle contraction, which increases pressure in the bladder and decreases the volume of urine the bladder can hold. If NDO is not treated, increased pressure in the bladder can put the upper urinary tract at risk of harm, including possible permanent damage to the kidneys. In addition, spontaneous bladder muscle contractions can lead to unexpected and frequent leakage of urine with symptoms of urinary urgency (immediate urge to urinate), frequency (urinating more often than normal) and incontinence (loss of bladder control). Solifenacin is contraindicated for people with urinary retention, gastric retention, uncontrolled or poorly controlled closed-angle glaucoma, severe liver disease (Child-Pugh class C)] and hemodialysis. Long QT syndrome is not a contraindication although solifenacin, like tolterodine and darifenacin, binds to hERG channels of the heart and may prolong the QT interval. This mechanism appears to be seldom clinically relevant. The most common side effects of solifenacin are dry mouth, constipation and urinary tract infection. As all anticholinergics, solifenacin may rarely cause hyperthermia due to decreased perspiration. Somnolence (sleepiness or drowsiness) has been reported. Severe allergic reactions, such as angioedema (swelling beneath the skin) and anaphylaxis, have been reported in people treated with solifenacin succinate and may be life-threatening. Solifenacin is metabolized in the liver by the cytochrome P450 enzyme CYP3A4. When administered concomitantly with drugs that inhibit CYP3A4, such as ketoconazole, the metabolism of solifenacin is impaired, leading to an increase in its concentration in the body and a reduction in its excretion. As stated above, solifenacin may also prolong the QT interval. Therefore, administering it concomitantly with drugs which also have this effect, such as moxifloxacin or pimozide, can theoretically increase the risk of arrhythmia. Solifenacin is a competitive cholinergic receptor antagonist, selective for the M3 receptor subtype. The binding of acetylcholine to these receptors, particularly M3, plays a critical role in the contraction of smooth muscle. By preventing the binding of acetylcholine to these receptors, solifenacin reduces smooth muscle tone in the bladder, allowing the bladder to retain larger volumes of urine and reducing the number of micturition, urgency and incontinence episodes. Because of a long elimination half life, a once-a-day dose can offer 24-hour control of the urinary bladder smooth muscle tone.

* Tamsulosin is a medication used to treat symptomatic benign prostatic hyperplasia (BPH) and chronic prostatitis and to help with the passage of kidney stones. The evidence for benefit with a kidney stone is better when the stone is larger. Common side effects include dizziness, headache, sleeplessness, nausea, blurry vision, and sexual problems. Other side effects may include feeling lightheaded with standing and angioedema. Tamsulosin is an alpha blocker and works by relaxing muscles in the prostate. Specifically it is an alpga1 adrenergic receptor blocker. Tamsulosin is primarily used for benign prostatic hyperplasia and to help with the passage of kidney stones. Tamsulosin, however, appears to be effective only for stones over 4 mm and less than 10 mm in size. Tamsulosin is also used as an add-on treatment for acute urinary retention. People may void more successfully after catheter removal if they are taking tamsulosin. People taking tamsulosin also are less likely to need re-catheterization. Tamsulosin does not decrease the overall size of the prostate in men with BPH, and is not recommended for prevention of prostate cancer.

* Tozinameran is an mRNA encoding full length of spike protein analog of SARS-CoV-2. Target severe acute respiratory syndrome coronavirus 2 spike glycoprotein. Coronavirus disease – COVID-19. Active immunization (SARS-CoV-2). The vaccination requires two primary series doses given three weeks apart. A third primary series dose may be administered at least 4 weeks after the second dose to individuals who are determined to have certain kinds of immunocompromise. A single booster dose of the vaccine may be administered at least 6 months after completion of a primary series with Tozinameran or with a different authorized COVID-19 vaccine.

* Trichloroacetic acid (TCA) is an analogue of acetic acid. It is a well-known caustic agent extensively used in dermatology, mainly in cosmetic peelings. It causes coagulative necrosis of cells through wide protein denaturation and resultant structural cell death. It is also used for ingrown toenails where TCA offers extra advantages, including coagulation and potent local anesthetic effects. TCA is a strong acid. It is widely recognized that skin contact of TCA has the potential to produce acid burns, and ingestion of TCA has the potential to damage tissues of the gastrointestinal tract or produce systemic acidosis, even though specific studies of these effects do not appear in the literature. TCA is relatively nontoxic to humans under circumstances of low exposures such as those encountered in chlorinated drinking water. In addition, the mode of tumor induction – peroxisomal proliferation – in animals is not relevant for humans.

* Turmeric-Mix. Turmeric, a plant in the ginger family, is native to Southeast Asia and is grown commercially in that region, primarily in India. Its rhizome (underground stem) is used as a culinary spice and traditional medicine. Historically, turmeric was used in Ayurveda and other traditional Indian medical systems, as well as Eastern Asian medical systems such as traditional Chinese medicine. In India, it was traditionally used for disorders of the skin, upper respiratory tract, joints, and digestive system. Today, turmeric is promoted as a dietary supplement for a variety of conditions, including arthritis, digestive disorders, respiratory infections, allergies, liver disease, depression,

high blood cholesterol, osteoarthritis pain, itching caused by chronic kidney disease, prediabetes, tuberculosis, Alzheimer's disease, cancer, inflammatory bowel diseases, and lowering the risk of a heart attack after bypass surgery. Turmeric is a common spice and a major ingredient in curry powder. Curcumin is a major component of turmeric, and the activities of turmeric are commonly attributed to curcuminoids (curcumin and closely related substances). Curcumin gives turmeric its yellow color. Turmeric dietary supplements are made from the dried rhizome and typically contain a mixture of curcuminoids. Turmeric is also made into a paste for skin conditions. Turmeric supplements may boost the immune system before Covid-19 vaccination. The recording plays the sound frequencies of Curcumin, Desmethoxycurcumin, Bisdemethoxycurcumin, Germacrone and Zingiberene.

1.3.1.45 RT-MB-57

https://archive.org/details/Resonant_Therapy-Molecular_Biology_57

Acetaminosalol; ACY-738; ALB Factor; Atosiban; Dalbavancin; Dicloxacillin; Diroximel fumarate; Doripenem; EGA; Eravacycline; Glycerol; Grape Seed Extract; Larazotide; Linzagolix; LR-10; Maralixibat; Meropenem; Mexiletine; MK-8719; Namodenoson; PXT3003; Ricolinostat; RWJ-58259; SRX246; Venglustat; VER-155008; Xenon-Nitrous Oxide-Oxygen; Xenon-Oxygen; ZY19489

* Acetaminosalol is an esterification product of salicylic acid and paracetamol. In a warm alkaline solution acetaminosalol is broken up into salicylic acid and paracetamol. It is decomposed in the intestines, even when given as an injection. It was used as a substitute for salicylic acid in acute rheumatism, and as an intestinal antiseptic. It was similarly effective and much safer than salol, another intestinal antiseptic commonly used at the time. Acetaminosalol is analgesic, anti-inflammatory and antipyretic.

* ACY-738 selectively inhibits histone deacetylase 6 HDAC6 with an IC 50 of 2 nM and efficiently crosses the blood-brain barrier (BBB). In FVB non-transgenic mice, subcutaneous injection of ACY-738 for 3 days (0.5 mg/kg) decreased p-tau species, as well as PHF in the brain and increased acetylation of tau on KXGS motifs. In primary neuronstransduced with human P301L tau-AAV, ACY-738 treatment (1mM, 24 h) inhibited HDAC6 activity and led to a significant reduction in tau levels and a striking decrease in phosphorylation at Ser-324. Used for tauopathies in neurodegenerative diseases.

* ALB Factor. Albumin is synthesized in the liver as preproalbumin, which has an N-terminal peptide that is removed before the nascent protein is released from the rough endoplasmic reticulum. The product, proalbumin, is in turn cleaved in the Golgi apparatus to produce the secreted albumin. Low albumin (hypoalbuminemia) may be caused by liver disease, nephrotic syndrome, burns, protein-losing enteropathy, malabsorption, malnutrition, late pregnancy, artefact, genetic variations and malignancy. High albumin (hyperalbuminemia) is almost always caused by dehydration. In some cases of retinol (Vitamin A)

deficiency, the albumin level can be elevated to high-normal values (e.g., 4.9 g/dL). This is because retinol causes cells to swell with water (this is also the reason too much Vitamin A is toxic). This swelling also likely occurs during treatment with 13-cis retinoic acid (isotretnoin), a pharmaceutical for treating severe acne, amongst other conditions. In lab experiments it has been shown that all-trans retinoic acid down regulates human albumin production. Hypoalbuminemia means low blood albumin levels. This can be caused by: Liver disease; cirrhosis of the liver is most common. Excess excretion by the kidneys (as in nephrotic syndrome). Excess loss in bowel (protein-losing enteropathy, e.g., Ménétrier's disease). Burns (plasma loss in the absence of skin barrier). Redistribution (hemodilution [as in pregnancy], increased vascular permeability or decreased lymphatic clearance). Acute disease states (referred to as a negative acute-phase protein). Malnutrition and wasting. Mutation causing analbuminemia (very rare). Anorexia nervosa (most common cause in adolescents). Hyperalbuminemia is an increased concentration of albumin in the blood. Typically, this condition is due to dehydration. Hyperalbuminemia has also been associated with high protein diets. Human albumin solution (HSA) is available for medical use (see Human Albumin Solution recording at https://archive.org/details/Resonant_Therapy-Molecular_Biology_54). In acoustic droplet vaporization (ADV), albumin is sometimes used as a surfactant. ADV has been proposed as a cancer treatment by means of occlusion therapy. Human serum albumin may be used to potentially reverse drug/chemical toxicity by binding to free drug/agent. Human albumin may also be used in treatment of decompensated cirrhosis. Human serum albumin has been used as a component of a frailty index. It has not been shown to give better results than other fluids when used simply to replace volume, but is frequently used in conditions where loss of albumin is a major problem, such as viral infection, inflammation and liver disease with ascites. It has been known for a long time that human blood proteins like hemoglobin and serum albumin may undergo a slow non-enzymatic glycation, mainly by formation of a Schiff base between epsilon-amino groups of lysine (and sometimes arginine) residues and glucose molecules in blood (Maillard reaction). This reaction can be inhibited in the presence of antioxidant agents. Although this reaction may happen normally, elevated glycoalbumin is observed in diabetes mellitus. Glycation has the potential to alter the biological structure and function of the serum albumin protein. Moreover, the glycation can result in the formation of Advanced Glycation End-Products (AGE), which result in abnormal biological effects. Accumulation of AGEs leads to tissue damage via alteration of the structures and functions of tissue proteins, stimulation of cellular responses, through receptors specific for AGE-proteins, and generation of reactive oxygen intermediates. AGEs also react with DNA, thus causing mutations and DNA transposition. Thermal processing of proteins and carbohydrates brings major changes in allergenicity. AGEs are antigenic and represent many of the important neoantigens found in cooked or stored foods. They also interfere with the normal product of nitric oxide in cells. In the healthy kidney, albumin's size and negative electric charge exclude it from excretion in the glomerulus. This is not always the case, as in some diseases including diabetic nephropathy, which can sometimes be a complication of uncontrolled or of longer term diabetes in which proteins can cross the glomerulus. The lost albumin can be detected by a simple urine test. Depending on the amount of albumin lost, a patient may have normal renal function, microalbuminuria, or albuminuria.

* Atosiban, is an inhibitor of the hormones oxytocin and vasopressin. It is used as an intr avenous medication as a labour repressant (tocolytic) to halt premature labor. The most commonly reported side effect is nausea. Atosiban is used to delay birth in adult women who are 24 to 33 weeks pregnant, when they show signs that they may give birth pre-ter m (prematurely). These signs include regular contractions lasting at least 30 seconds at a rate of at least four every 30 minutes, and dilation of the cervix (the neck of the womb) of 1 to 3 cm and an effacement (a measure of the thinness of the cervix) of 50% or mor e. In addition, the baby must have a normal heart rate. Atosiban is a nonapeptide, desa mino-oxytocin analogue, and a competitive vasopressin/oxytocin receptor antagonist (V OTra). Atosiban inhibits the oxytocin-mediated release of inositol trisphosphate from the myometrial cell membrane. As a result, reduced release of intracellular, stored calcium f rom the sarcoplasmic reticulum of myometrial cells and reduced influx of Ca2+ from the extracellular space through voltage-gated channels occur. In addition, atosiban suppres ses oxytocin-mediated release of PGE and PGF from the decidua. In human preterm la bour, atosiban, at the recommended dosage, antagonises uterine contractions and indu ces uterine quiescence. The onset of uterus relaxation following atosiban is rapid, uterin e contractions being significantly reduced within 10 minutes to achieve stable uterine qu iescence. Atosiban is useful in improving the pregnancy outcome of in vitro fertilization-e mbryo transfer (IVF-ET) in patients with repeated implantation failure. The pregnancy ra te improved from zero to 43.7%. First- and second-trimester bleeding was more prevale nt in Assisted Reproductive Technology ART than in spontaneous pregnancies. From 20 04 to 2010, 33 first-trimester pregnancies with vaginal bleeding after ART with evident ut erine contractions, when using atosiban and/or ritodrine, no preterm delivery occurred b efore 30 weeks. A 2014 systematic review by the Cochrane Collaboration showed that while atosiban had fewer side effects than alternative drugs (such as ritodrine), other be ta blockers, and calcium channel antagonists, it was no better than placebo in the major outcomes i.e. pregnancy prolongation or neonatal outcomes. The finding of an increase in infant deaths in one placebo-controlled trial warrants caution. Further research is reco mmended. A 2013 retrospective study comparing the efficacy and safety of atosiban an d nifedipine in the suppression of preterm labour concluded that atosiban and nifedipine are effective in delaying delivery for seven days or more in women presenting with prete rm labour. A total of 68.3% of women in the atosiban group remained undelivered at sev en days or more, compared with 64.7% in the nifedipine group. They have the same effi cacy and associated minor side effects. However, flushing, palpitation, and hypotension were significantly higher in the nifedipine group.

* Dalbavancin is a novel second-generation lipoglycopeptide antibiotic medication. It bel ongs to the same class as vancomycin, the most widely used and one of the few treatm ents available to patients infected with methicillin-resistant Staphylococcus aureus (MR SA). It possesses in vitro activity against a variety of Gram-positive pathogens including MRSA and methicillin-resistant Staphylococcus epidermidis (MRSE). Dalbavancin is an antibiotic used to treat acute bacterial skin and skin structure infections (ABSSSI) in adu lts caused by susceptible Gram-positive organisms, including methicillin-resistant Staph ylococcus aureus (MRSA). Because dalbavancin has demonstrated efficacy against MR SA and other microorganisms to treat serious or life-threatening infections, it was the firs t drug approved as a Qualified Infectious Disease Product under the Generating Antibiot

ic Incentives Now (GAIN) act, which is part of the FDA Safety and Innovation Act. Hyper sensitivity to dalbavancin can occur, causing issues such as skin reactions or anaphylax is. Caution is advised for patients with known hypersensitivity to other glycopeptides. Th ere is currently no data on cross-reactivity between dalbavancin and vancomycin. The most common adverse reactions encountered in Phase II and Phase III trials were naus ea (5.5%), headache (4.7%), and diarrhea (4.4%), as well as rash (2.7%) and itchiness (2.1%). Other less frequent but serious adverse reactions included hematologic disorder s, hepatotoxicity, Clostridium difficile colitis, bronchospasm, infusion-related reactions in cluding Red Man Syndrome, and anaphylactic shock. In trials, dalbavancin was associat ed with higher rates of hemorrhagic events compared to comparator groups and should be a precaution in patients undergoing surgery or taking anticoagulants. Patients on dal bavancin also had post-baseline alanine aminotransferase (ALT) levels that were 3 time s the upper normal limit, some even having elevations 10 times the upper normal limit; h owever, eight of the twelve dalbavancin-treated patients had comorbid conditions that c ould affect their ALT, compared to only one patient in the comparator group. There is no evidence of ototoxicity associated with dalbavancin.

* Dicloxacillin is a narrow-spectrum beta-lactam antibiotic of the penicillin class. It is use d to treat infections caused by susceptible (non-resistant) Gram-positive bacteria. It is a ctive against beta-lactamase-producing organisms such as Staphylococcus aureus, whi ch would otherwise be resistant to most penicillins. Dicloxacillin is used to treat mild-to-moderate staphylococcal infections. To decrease the development of resistance, dicloxa cillin is recommended to treat infections that are suspected or proven to be caused by b eta-lactamase-producing bacteria. Dicloxacillin is similar in pharmacokinetics, antibacter ial activity, and indications to flucloxacillin, and the two agents are considered interchan geable. It is believed to have lower incidence of severe hepatic adverse effects than fluc loxacillin, but a higher incidence of renal adverse effects. Dicloxacillin is used for the tre atment of infections caused by susceptible bacteria. Specific approved indications inclu de: Staphylococcal skin infections and cellulitis – including impetigo, otitis externa, folliculitis, boils, carbuncles, and mastitis. Pneumonia (adjunct). Osteomyelitis, septic arthritis, throat infections, streptococcus. Septicaemia. Empirical treatment for endocarditis. Surgical prophylaxis. Dicloxacillin is contraindicated in those with a previous history of allergy (hypersensitivity/anaphylactic reaction) to any penicillins. Common adverse drug reactions (ADRs) associated with the use of dicloxacillin include: diarrhea, nausea, rash, urticaria, pain and inflammation at injection site, superinfection (including candidiasis), allergy, and transient increases in liver enzymes and bilirubin. It should be used with caution and monitored in the elderly, particularly with intravenous administration, due to a risk of thrombophlebitis. Dicloxacillin can also lower the effectiveness of birth control pills and pass into breast milk. Dicloxacillin has potential interactions with following drugs: Warfarin, Methotrexate, Tetracycline.

* Diroximel fumarate is a medication used for the treatment of relapsing forms of multiple sclerosis (MS). Multiple Sclerosis (MS) is a chronic, debilitating neurological disease that can lead to profound cognitive and physical symptoms, severely affecting quality of life. It is the main cause of neurological disability not caused by trauma in the young adult population of both North America and Europe. Relapsing-remitting forms of

MS lead to neurological symptoms that resolve and recur periodically. More than 80% of patients suffering from this disease have relapsing-remitting MS. Diroximel fumarate is a new drug from the fumarate class formulated to treat various relapsing forms of MS. This drug is bioequivalent to [Dimethyl fumarate](initially manufactured in 2013), but is less likely to cause gastrointestinal side effects, owing to its unique chemical structure.

* Doripenem is an antibiotic drug in the carbapenem class. It is a beta-lactam antibiotic drug able to kill Pseudomonas aeruginosa. Doripenem can be used for bacterial infections such as: complex abdominal infections, pneumonia within the setting of a hospital, and complicated infections of the urinary tract including kidney infections with sepsis. The greater stability of doripenem in aqueous solution compared to earlier members of the carbapenem class allows it to be administered as an infusion over 4 hours or more, which may be advantageous in the treatment of certain difficult-to-treat infections. It may present a lower risk of inducing seizures than other carbapenems. Doripenem is a beta-lactam antibiotic agent belonging to the carbapenem group, with a broad spectrum of bacterial sensitivity including both gram-positive and gram-negative bacteria. In vivo, doripenem inhibits the synthesis of cell walls by attaching itself to penicillin-binding proteins, also known as PBPs. However it is not active against MRSA. It is stable against beta-lactamases including those with extended spectrum, but it is susceptible to the action of carbapenemases. Doripenem is also more active against Pseudomonas aeruginosa than other carbapenems. Seizure risk: carbapenems in general have been reported to cause seizure activity in some people. In addition, those who already have a seizure disorder may be at risk for further seizures if they are using valproic acid to control their seizures; doripenem has been found to decrease serum concentrations of valproic acid. Infection related: use of doripenem can lead to clostridium difficile infection. It has also been noted to increase mortality in people who have ventilator-associated bacterial pneumonia, and is no longer recommended as a treatment for this condition.

* EGA or 2-[(4-Bromophenyl)methylene]-N-(2,6-dimethylphenyl)-hydrazinecarboxamide is a bioactive small molecule that blocks the entry of anthrax lethal toxin by inhibiting trafficking pathways in acidified endosomes, without affecting endosome pH. EGA prevents the Tetanus neurotoxin-induced cleavage of VAMP-2 in cultured neurons. EGA has similar effect on Tetanus neurotoxin by Clostridium tetani and botulinum neurotoxins by Clostridium botulinum intoxication -botulism. EGA blocks trafficking of other toxins, including diphtheria toxin, but does not inhibit trafficking of ricin. The compound EGA attenuates lysosomal targeting and degradation of the EGF receptor, but does not block endosomal recycling of transferrin.

* Eravacycline is a synthetic halogenated tetracycline class antibiotic. It is closely related to tigecycline. It has a broad spectrum of activity including many multi-drug resistant strains of bacteria. Eravacycline has been granted fast track designation by the FDA. Eravacycline has shown broad spectrum of activity against a variety of Gram-positive and Gram-negative bacteria, including multi-drug resistant strains, such as methicillin-resistant Staphylococcus aureus (MRSA) and carbapenem-resistant Enterobacteriaceae. It is currently being formulated as for intravenous and oral

administration. Similar to other tetracycline derivatives, eravacylcine is poorly active against Pseudomonas aeruginosa with a MIC90 = 16 mcg/mL (range 0.06-64 mcg/mL). Eravacycline maintains in-vitro activity against Enterobacteriaceae carrying the mcr-1 gene responsible for polymyxin b/colistin resistance.

* Glycerol is a triol with a geroprotective role. Glycerin is a trihydroxyalcohol with localized osmotic diuretic and laxative effects. Glycerin elevates the blood plasma osmolality thereby extracting water from tissues into interstitial fluid and plasma. This agent also prevents water reabsorption in the proximal tubule in the kidney leading to an increase in water and sodium excretion and a reduction in blood volume. Administered rectally, glycerin exerts a hyperosmotic laxative effect by attracting water into the rectum, thereby relieving constipation.

* Grape Seed Extract is derived from the ground-up seeds of red wine grapes. Grape seeds are rich in antioxidants, including phenolic acids, anthocyanins, flavonoids, and oligomeric proanthocyanidin complexes (OPCs). In fact, GSE is one of the best-known sources of proanthocyanidins. GSE may help reduce blood pressure, particularly in young to middle-aged people and those who have excess weight. GSE has been shown to improve blood flow and reduce the risk of blood clotting, which may benefit those with circulatory problems. GSE is recommended for pancreatic health and Pancreatitis. GSE may help reduce the risk of heart disease by inhibiting the oxidation of LDL (bad) cholesterol and reducing oxidation to heart tissue during times of stress. Animal studies show promising results regarding GSE’s ability to help treat arthritic conditions and promote collagen health. However, human-based research is lacking. GSE shows potential to inhibit many of the degenerative characteristics of brain and cognitive decline. However, more human studies are needed. GSE may offer protection against damage from oxidative stress and inflammation, thus promoting kidney health. GSE may inhibit a variety of microbes and offer protection against antibiotic-resistant bacterial strains, foodborne bacterial illnesses, and fungal infections like candida. In lab studies, GSE has been shown to inhibit cancer in various human cell types. GSE also appears to reduce chemotherapy-induced toxicity in animal studies without negatively affecting treatment. More human-based research is needed. GSE appears to protect your liver against drug-induced toxicity and damage. However, more human studies are needed. GSE creams appear to increase growth factors in your skin. As such, they may aid wound healing and help reduce the signs of skin aging. Those who are pregnant or breastfeeding should avoid it, as there is insufficient data on its effects in these populations. GSE may lower blood pressure, thin your blood, and increase blood flow, so caution is advised for those taking blood-thinning or blood pressure medications. Furthermore, it may reduce iron absorption, as well as improve liver function and drug metabolism.

* Larazotide is a single-chain peptide of eight amino acids that acts as a tight junction regulator to restore intestinal barrier function. Larazotide is the only Phase 3 therapeutic in development for celiac disease, with data readouts expected in 2022. Larazotide is designed to mitigate the life-altering symptoms that people with celiac disease may experience when they ingest gluten. Specifically, larazotide prevents gluten breakdown

product, gliadin, from entering the systemic circulation through compromised tight junctions between intestinal cells that occur in celiac disease, and in turn propagating an inflammatory response in the gut. Larazotide is an adjunctive therapy in tandem with a gluten-free diet in adults with celiac disease to restore tight junctions between intestinal cells, mitigate gliadin "leakage," and thus minimize symptoms. Larazotide acetate (formerly named AT-1001 is an octapeptide derived from a cholera ZOT toxin, and contains amino acid sequences shared by the receptor binding-motif of zonulin. A substantial role of zonulin in many chronic and acute inflammatory diseases has been demonstrated in both in vivo and in vitro, indicating the possible efficacy of a Larazotide treatment. Larazotide’s mechanism of action and different diseases: celiac disease, type 1 diabetes, other autoimmune diseases, inflammatory bowel disease, Kawasaki disease, respiratory (infective and/or non-infective) diseases, and other. The most severe outcome of COVID-19 infection is the development of interstitial pneumonia causing acute lung injury (ALI) and/or acute respiratory distress syndrome (ARDS), both responsible for the infected patients' mortality. ALI and ARDS are characterized by a leakage of plasma components into the lungs, compromising their ability to expand and optimally engage in gas exchange with blood, resulting in respiratory failure. AT1001, besides its well-demonstrated effect in ameliorating mucosal permeability in ALI/ARDS, may also exert a direct anti-SARS-CoV-2 effect by blocking the Mpro. AT1001 has been used extensively in a variety of animal models of ALI demonstrating robust safety and efficacy. AT1001 may represent an innovative therapeutic option to multi-target both early COVID-19 upper airway infections (reducing interpersonal spreading) and distal airway infections responsible for the functional failure of lungs and other organs.

* Linzagolix is a gonadotropin-releasing hormone (GnRH or LHRH) receptor antagonist, with potential hormone production inhibitory activity. Upon oral administration of linzagolix, this agent competes with GnRH for receptor binding and inhibits GnRH receptor signaling in the anterior pituitary gland, thereby inhibiting the secretion and release of luteinizing hormone (LH) and follicle stimulating hormone (FSH). In males, the inhibition of LH secretion prevents the release of testosterone. As a result, this may relieve symptoms associated with hormonally dependent disease states such as hormone-dependent prostate cancer. In women, this prevents the production of estrogen by the ovaries and may relieve symptoms from sex-hormone dependent diseases, such as pain associated with endometriosis, heavy menstrual bleeding or uterine fibroids. Additional examples of estrogen-dependent diseases include adenomyosis and rectovaginal endometriosis, which are particularly severe endometrial growth disorders characterized by the invasion of endometrial tissue into the uterine myometrium and rectovaginal zones, respectively.

* LR-10 is more active against S. mutans [3.3 micromolars (μM)] than many peptide-bas ed agents without resistance selection, capable of killing many oral pathogens, and toler ant of physiological conditions. LR-10 also presented a faster killing rate than chlorhexid ine and erythromycin, and appeared to display selective activity against S. mutans withi n 10 s. S. mutans is usually encased in plaque biofilms. Biofilm inhibitory assays indicat ed that LR-10 had excellent inhibitory effect on the biofilm formation of S. mutans and bi ofilm-encased cells in vitro at low concentrations (6.5 μM). Consistent with most peptide

s, LR-10 kills S. mutans mainly by disrupting the cell membranes. Notably, both hemolyt ic activity assays and cytotoxicity tests indicated that LR-10 could keep biocompatible at the effective concentrations. Hence, LR-10 could be a good candidate for clinical treatm ent of dental caries.

* Maralixibat, an apical, sodium-dependent, bile acid transport inhibitor, prevents entero hepatic bile acid recirculation. Alagille syndrome is a rare genetic disease that often pre sents with severe cholestasis and pruritus. There are no approved drugs for manageme nt. Maralixibat was generally safe and well tolerated throughout. The most frequent adv erse events were gastrointestinal related. Most adverse events were self-limiting in natu re and mild-to-moderate in severity. In children with Alagille syndrome, maralixibat is, to our knowledge, the first agent to show durable and clinically meaningful improvements i n cholestasis. Maralixibat might represent a new treatment paradigm for chronic cholest asis in Alagille syndrome. (https://doi.org/10.1016/S0140-6736(21)01256-3)

* Meropenem, is an intravenous beta-lactam antibiotic used to treat a variety of bacterial infections. Some of these include meningitis, intra-abdominal infection, pneumonia, sep sis, and anthrax. Common side effects include nausea, diarrhea, constipation, headach e, rash. Serious side effects include Clostridium difficile infection, seizures, and allergic r eactions including anaphylaxis. Those who are allergic to other beta-lactam antibiotics a re more likely to be allergic to meropenem as well. Use in pregnancy appears to be safe. It is in the carbapenem family of medications. Meropenem usually results in bacterial d eath through blocking their ability to make a cell wall. It is more resistant to breakdown b y beta-lactamase producing bacteria. The spectrum of action includes many Gram-positi ve and Gram-negative bacteria (including Pseudomonas) and anaerobic bacteria. The o verall spectrum is similar to that of imipenem, although meropenem is more active again st Enterobacteriaceae and less active against Gram-positive bacteria. It works against e xtended-spectrum beta-lactamases, but may be more susceptible to metallo-beta-lacta mases. Meropenem is frequently given in the treatment of febrile neutropenia. This cond ition frequently occurs in patients with hematological malignancies and cancer patients r eceiving anticancer drugs that suppress bone marrow formation. It is approved for comp licated skin and skin structure infections, complicated intra-abdominal infections and ba cterial meningitis. The most common adverse effects are diarrhea (4.8%), nausea and v omiting (3.6%), injection-site inflammation (2.4%), headache (2.3%), rash (1.9%) and th rombophlebitis (0.9%). Many of these adverse effects were observed in severely ill indiv iduals already taking many medications including vancomycin. Meropenem has a reduc ed potential for seizures in comparison with imipenem. Several cases of severe hypokal emia have been reported. Meropenem, like other carbapenems, is a potent inducer of m ultidrug resistance in bacteria.

* Mexiletine is a medication used to treat abnormal heart rhythms. It is also being investi gated for use as a muscle relaxant in patients with Charcot-Marie-Tooth disease (CMT). For muscle contraction, the brain sends an electric signal to the muscles through so-call ed motor neurons. The transmission of the electric signals requires the opening and clo sing of sodium channels in the membrane (the outer layer of the cell) of the motor neuro n. When an electric signal stimulates a nerve fiber, sodium channels open, positively ch

arged sodium ions enter the cell, and the inner side of the membrane becomes positive. Once the signal has passed, sodium channels close again. When the electric signal rea ches the point where the motor neuron meets the muscle fiber, a neurotransmitter is rel eased by the nerve cell and binds to receptors on the muscle fiber. This again activates sodium channels in the muscle membrane, and the electric signal stimulates muscle co ntraction. A muscle cramp occurs when muscles contract suddenly and involuntarily. CM T patients experience frequent and severe muscle cramps. Mexiletine blocks sodium ch annels and consequently reduces the influx of sodium ions into the cell. It may decrease the signal intensity or frequency, promoting muscle relaxation. Mexiletine should not be used in patients with serious heart conditions. The medication may cause liver injury. As a result, in individuals with liver disease, mexiletine should be used with caution. Comm on side effects of mexiletine are heartburn, nausea, dizziness, and problems with coordi nation.

* MK-8719 is a highly potent and selective OGA inhibitor. Preclinical data confirmed that sub-chronic administration of MK-8719 significantly increased protein O-GlcNAcylation, reduced pathological tau accumulation, decreased inflammatory marker expression and attenuated brain weight loss and forebrain volume loss in Tg4510 mouse brain. The Pha se I study in 16 healthy volunteers shows that MK-8719 is safe and well tolerated at sin gle doses up to 1200 mg in subjects. Its efficacy was also assessed by measuring O-Gl cNAcylated protein levels in peripheral blood mononuclear cells, which increased in a d ose-dependent manner. In 2016, FDA granted orphan drug designation to MK-8719 for t he treatment of progressive supra-nuclear palsy (PSP), one of the neurodegenerative ta uopathies related to AD.

* Namodenoson is an orally bioavailable, synthetic, highly selective adenosine A3 recep tor (A3AR) agonist with potential antineoplastic activity. Namodenoson selectively binds to and activates the cell surface-expressed A3AR, deregulating Wnt and NF-kB signal tr ansduction pathways downstream, which may result in apoptosis of A3AR-expressing tu mor cells. A3AR, a G protein-coupled receptor, is highly expressed on the cell surfaces of various solid tumor cell types, including hepatocellular carcinoma (HCC) cells, and pl ays an important role in cellular proliferation. Namodenoson has been used in trials stud ying the treatment of Chronic Hepatitis C and Hepatocellular Carcinoma. Namodenoso n’s very impressive study data may result in a promising drug for the treatment of NAFL D/NASH due to the combination of good efficacy and favorable safety. Anti-Inflammator y effect – a significant decrease in the liver enzymes ALT and AST and significant improvement in the positive cytokine adiponectin was recorded in the Namodenoson 25 mg treated group. Reduced liver fat content - manifested by a significant reduction in % of liver fat volume assessed by MRI-PDFF and a decrease in the Controlled Attenuation Parameter (CAP – score ≥ 331) measured by FibroScan in the Namodenoson 25 mg group. Decrease in FIB-4 and FAST – non-invasive tests showed anti-fibrosis effect in Namodenoson 25 mg group. Decrease in body weight - a linear decrease in body weight was recorded in the 25 mg and 12.5 mg Namodenoson groups with a better effect in the higher dose. Safety - Namodenoson continued to have a safe profile and was very well tolerated with no drug emergent severe adverse effects and no hepatotoxicity. Elevation of IOP induces impairment and apoptotic death of retinal

ganglion cells RGCs, and A3AR agonists such as Namodenoson preserve RGCs from apoptosis induced by P2X7R activation (e.g., ATP or other nucleotides). Namodenoson has also shown proof of concept to potentially treat other cancers including colon, prostate, and melanoma.

* PXT3003 is an investigational therapy to treat Charcot-Marie-Tooth type 1A (CMT1A). Charcot-Marie-Tooth (CMT) disease is a group of inherited disorders that affect the peripheral nervous system, which controls movement and relays sensory information from the arms and legs to the brain. A number of genetic defects can lead to poor nerve function in CMT. CMT1A, the most common form of CMT, is caused by an extra copy of the PMP22 gene. The protein that this gene codes for, also called PMP22, forms part of the myelin sheath — a layer of protein and fatty substances that surrounds nerves and helps them efficiently fire electrical signals. Before the PMP22 protein can be incorporated into the myelin sheath, it is processed to become functional. The extra copy of the PMP22 gene causes too much PMP22 protein to be made, which disrupts proper formation of myelin in the peripheral nervous system (outside the brain and spinal cord), and leads to loss of nerve fibers and muscle shrinkage. PXT3003 contains a combination of three existing and approved treatments. Baclofen is a muscle relaxant used to treat spasticity, naltrexone is used to treat opiate and alcohol addiction, and sorbitol is a laxative used to treat constipation. The combination of the three treatments is intended to reduce the levels of PMP22, promote nerve fiber integrity, and improve myelin formation (myelination). In addition, sorbitol is thought to act as a “chaperone,” which increases the chances of the PMP22 protein being correctly processed and becoming functional. In a rat model of CMT1A, PXT3003 successfully reduced PMP22 gene activity and increased myelination. Studies in animals have also shown that all three components of PXT3003 are necessary for improvements in motor function and fewer muscle cells undergoing nerve-related shrinkage. PXT3003 may also have beneficial effects on other cellular targets, such as muscle cells and the junction between muscle and nerve. The FDA and the European Medicines Agency granted PXT3003 orphan drug designation in 2014. The FDA also granted the therapy its fast track designation in 2019. China’s National Medical Products Administration granted the treatment priority review in June 2018.

* Ricolinostat (ACY-1215) is an experimental therapy being developed by Regenacy Pharmaceuticals to treat diabetic and chemotherapy-induced peripheral neuropathy. The company also entered a partnership with the Charcot-Marie-Tooth Association (CMTA) in 2018 to advance the development of ricolinostat to possibly treat Charcot-Marie-Tooth (CMT) disease. CMT is characterized by peripheral neuropathy, or damage to the nerves that carry messages between the brain and spinal cord and the rest of the body. This damage leads to weakness, numbness, and pain in the hands, feet, arms, and legs. Nerve cells in the peripheral nervous system often have axons, or extensions, that cover long distances. Most cellular components are manufactured close to the body of the cell, near the nucleus. Proteins, as they are made, need to be transported from their manufacturing center near the nucleus to a cell’s far reaches. Because the axons of peripheral nerves are so long, this transport is especially challenging. Vesicles (a type of small “shipping” compartment) and proteins travel along a cellular “railway” made up

of tubulin proteins woven together like fibers to make a thick, more stable transit path. In at least some cases of CMT, the disease may be caused by the destabilization of this tubulin supply network. A particular chemical modification called acetylation changes the way tubulin folds, so that the fibers stick to each other instead of existing as individual subunits; the loss of the chemical modification makes the tubulin proteins unstable, and the network falls apart. Without the supply network, vesicles cannot get to the far reaches of a cell’s axon, and nerve cells cannot work properly. Ricolinostat is a small molecule that inhibits an enzyme called histone deacetylase 6 (HDAC6), which removes acetyl groups from proteins. By blocking this enzyme, the acetylation on tubulin remains and stabilizes the supply network in the nerve. If the supply network is stable, the neuropathy caused by CMT may ease or end altogether. Ricolinostat has been shown to be safe and well-tolerated in Phase 1 and Phase 2 clinical trials involving healthy volunteers. Ricolinostat is an orally bioavailable, specific inhibitor of histone deacetylase 6 (HDAC6) with potential antineoplastic activity. Ricolinostat selectively targets and binds to HDAC6, thereby disrupting the Hsp90 protein chaperone system through hyperacetylation of Hsp90 and preventing the subsequent aggresomal protein degradation. This leads to an accumulation of unfolded and misfolded ubiquitinated proteins and may eventually induce cancer cell apoptosis, and inhibition of cancer cell growth. HDAC6, a class II HDAC deacetylase located in the cytoplasm, appears to play a key role in the formation and activation of the aggresomes needed for degradation of misfolded proteins. Compared to non-selective HDAC inhibitor, ACY-1215 is able to reduce the toxic effects on normal, healthy cells. Ricolinostat is also under investigation for the treatment of Breast Carcinoma and Metastatic Breast Cancer.

* RWJ-58259 is a potent and selective inhibitor of PAR-1 identified as part of a synthetic chemistry program based upon a de novo design approach. RWJ-58259 inhibited thrombin-induced platelet aggregation in human platelets with an IC50 of 0.37 microM without inhibiting thrombin's proteolytic activity or aggregation induced by other agonists. RWJ-58259 was effective in a non-human primate model of thrombosis. Because human platelets have a PAR expression profile similar to the non-human primate, PAR-1 antagonism has the potential to be antithrombotic in humans. RWJ-58259 also inhibited thrombin-induced intracellular calcium signaling and proliferation in rat vascular smooth muscle cells. Perivascular application of RWJ-58259 in vivo significantly inhibited arterial injury-induced stenosis in a rat model of balloon angioplasty. These preclinical results suggest a potential clinical utility of RWJ-58259 for treatment of thrombotic disorders and vascular injury associated with acute coronary interventions and atherosclerosis. Given the potential role of PAR-1 in thrombin's actions in other cell types and disease states, RWJ-58259 provides a means for assessing additional clinical utilities of PAR-1 antagonism in disease conditions such as inflammation, cancer and neurodegeneration.

* SRX246, also known as API-246, is a small-molecule, centrally-active, highly-selective vasopressin V1A receptor antagonist which is under investigation for the treatment of affective and anger disorders. It is an azetidinone derivative, and was developed from LY-307174 as a lead compound. A phase II activity trial of the drug in the treatment of adults with intermittent explosive disorder is ongoing. It is also being studied for the

treatment of post-traumatic stress disorder.

* Venglustat is a glucosylceramide synthase (GCS) inhibitor, a brain-penetrant clinical candidate for GBA-mutant Parkinson's disease and other diseases where GBA-mutations are relevant. Though the molecule did not demonstrate efficacy within one year in early GBA-PD patients and was discontinued in this indication, it continues to be tested in various rare genetic diseases including Gaucher disease type 3, Fabry disease, GM2 gangliosidosis, and autosomal-dominant polycystic kidney disease, as its safety has already been demonstrated. A new generation of UGCG inhibitor, venglustat (GZ/SAR402671), could cross the BBB and is in trials for Gaucher, Fabry, and Tay-Sachs diseases. GD and GD-Parkinson mouse studies and cell models currently provide evidence that the related compound (GZ667161) reduces GC's level in the brain.

* VER-155008 (i.p. 10 mmol/kg/day, 18 days), was shown to significantly reduce amyloid plaques and PHF tau accumulation in 5 xFAD mice. Furthermore, VER-155008 penetrated into the brain after i.p. administration, suggesting that VER-155008 can act in the brain in situ. Used for tauopathies in neurodegenerative diseases.

* Xenon-Nitrous Oxide-Oxygen is a mixture which acts on at least one cerebral receptor so as to preventing or treat neurointoxication in a human. In particular the neurotoxic effects of drugs or other addictive substances. In pathologies linked to the neurotoxic effects of addictive drugs, such as amphetamines, it is recognized that dopaminergic neurotransmission of nigrostriatal and mesolimbic origin participates in the psycho-stimulating and neurotoxic effects of these drugs. The mixture acts on one or more cerebral receptors to reduce the release and/or the effects of dopamine, glutamate, serotonin, taurin, GABA, noradrenaline and/or any other neurotransmitter.

* Xenon-Oxygen therapy is a method of treating various neurological, cardiological and other diseases, based on the use of an inert gas - xenon. Possessing unique analgesic, anti-inflammatory, soothing properties, xenon is used in many medical fields, including rehabilitation treatment.was discovered to have unique biological properties, has a remarkable safety profile, has been extensively used in imaging and is approved in some jurisdictions for use in general anesthesia. It is a non-psychomimetic, non-habit forming, non-flammable, non-greenhouse gas with rapid bioavailability and rapid brain penetrance. Interaction of xenon atoms with aromatic amino-acid residues on NMDA receptors provides highly specific and controllable antagonism. In addition, it reduces excitatory neurotransmission by blocking AMPA, nACh (α4beta2), 5-HT3, plasma memb rane Ca2+ ATPase and increases inhibitory neurotransmission by stimulating GlyR1 an d TREK-1 potassium channel. It is also shown to reduce pro-inflammatory cytokines (tu mor necrosis factor α, interleukin 1beta), to increase pro-survival factors (bcl2), and gro wth factor production (BDNF, IGF).When used in the form of inhalation (mixed with oxyg en), a therapeutic effect quickly occurs. Xenon can be combined with many pharmacolo gical drugs, while inhalation can reduce the dose of medications prescribed to the patie nt. Thanks to xenon therapy, patients normalize sleep, reduce pain syndromes, increase working capacity and vitality. The therapeutic effect of xenon is as follows: Anesthetic eff

ect - in the presence of chronic pain, xenon inhalations can reduce the dose of analgesi cs. It stops attacks of panic attacks. Relieves an attack of migraine headaches. Improve s mood and provides emotional lift. Increases efficiency and improves overall well-being. It stabilizes blood circulation and improves the function of the brain and heart muscle. One and a half times reduces the time of withdrawal of withdrawal symptoms in alcoholi sm and drug addiction. Reduces the toxicity of drugs, reduces their dosage. Accelerates the healing process of wounds. Reduces the concentration of stress hormones in the bl ood. Eliminates spasm of capillaries. Natural antidepressant, which does not affect the p atient's emotional-volitional sphere, is not addictive, and the effect occurs immediately, y ou do not need to wait for some time, as for example when using other types of antidepr essants. The effect of xenon therapy: With sleep disorders, in almost all patients, after a course of xenon therapy, sleep normalizes; With xenon therapy in depressive states, the patient disappears feeling of anxiety and depression, improves mood; With migraines - t here is a decrease in pain; With chronic fatigue syndrome - increased performance and vitality; After operations and diseases, an early recovery of the body occurs; In the pres ence of chronic degenerative or inflammatory processes, the general condition of the bo dy improves; In chronic pain of various origins, patients note a significant decrease in th e intensity and frequency of pain; In sports medicine, during the training of athletes, xen on increases the stamina of the body and its physical capabilities, while not being dopin g; With a calming effect, xenon can save a person from fear of surgery or an unpleasant procedure. Direct contraindications are: Acute phase of myocardial infarction (up to 14 d ays), Acute and chronic severe (III) insufficiency, pneumothorax, Unstable angina (until t he process stabilizes), Severe circulatory failure, Congenital and acquired heart defects in the phase of decompensation of blood circulation, Acute myocarditis and pericarditis, hemorrhagic type of cerebrovascular accident, Severe respiratory failure, Epilepsy, Con vulsive syndrome, Acute infectious diseases, fever, Obstructive sleep apnea syndrome, with rare and severe form (for patients with suspected sleep apnea, computer monitorin g pulse oximetry is preliminarily performed), Schizophrenia.

* ZY19489 is a novel antimalarial compound active against all current clinical strains of P. falciparum and P. vivax, including drug-resistant strains. ZY19489 (MMV253), has rec eived Orphan Drug Designation from the USFDA. ZY19489 has demonstrated a long ha lf-life and potential for a single-dose cure for malaria. In a separate malaria challenge tri al, potent antimalarial activity has been demonstrated following single-dose oral adminis tration of ZY19489. ZY19489 is a potent, first in class molecule with tremendous potenti al as part of a new generation of treatments and is fully active against drug resistant stra ins of malaria which are increasingly a concern. Artemisinin resistance is seen as a mou nting challenge to the global fight against malaria. ZY19489 is being developed to provi de an effective alternative to the current front-line antimalarial drugs for the treatment of P. falciparum and P. vivax malaria, as artemisinin-based combination therapies (ACTs) a re under threat of resistance.

1.3.1.46 RT-MB-58

https://archive.org/details/Resonant_Therapy-Molecular_Biology_58

AG1; Apple Cider Vinegar-Mix; AVPR1A Factor; Azadirachtin; Cycloastragenol; Defensa mide; Eliapixant; Galectin-9; Gallium maltolate; Kaolin; Margolone-Margolonone; Mariba vir; Metronidazole; Nangibotide; Naronapride; Pandulatin A; Pandulatin A-Pinostrobin; P ectolinarigenin; Piclidenoson; Pinostrobin; Rabeximod; Regdanvimab; Relcovaptan; RG FP-966; Rimegepant; Sevoflurane; Sildenafil; SIRT6 Activators; Tianagliflozin; XEN901

* AG1 is a small molecule activator that has demonstrated effectiveness in treating G6P D deficiency in models. G6PD deficiency is a common enzymatic disorder that is inherit ed in an X-linked manner. Glucose-6-phosphate dehydrogenase (G6PD) deficiency is o ne of the commonest forms of enzymatic disorders affecting humans worldwide. Four-h undred million people across the globe are estimated to be affected, with the highest pr evalence being in those of African, Asian and Mediterranean descent. In the past it was noted that there was an increased prevalence of the disease in high-risk countries whic h often correlated to the demographics observed with malaria. However, in recent times due to significant globalization and the accompanying migration of individuals, there has been a considerable change in population demographics. Hence, in the majority of coun tries, there exists pockets of population groups that are affected by the disorder, causing an increase in prevalence of this disorder in countries where it would be considered rare in the past. In the United States, for instance, people of African-American descent are o bserved to be predominantly affected by the disorder. In recent years, the frequency of t he affected population is as high as about 10-14%.Unlike other enzymatic disorders, the majority of the population affected by the disease are asymptomatic, unless they inherit a severe mutant copy of the enzyme. Clinical features appear only after exposure to cer tain oxidative stressors which primarily include antimalarial drugs, infection and, fava be ans. A group of researchers, in 2019, looked at devising therapeutic measures for G6PD deficiency. They postulate that the use of small molecule activators of the enzyme can p romote the activity of the enzyme in deficient patients. G6PD deficiency was first identifi ed in the 1950s as a disorder that primarily affects the red blood cells, causing a myriad of symptoms including acute hemolytic anemia, neonatal jaundice and chronic nonspher ocytic hemolytic anemia. Currently, there is no effective treatment for the deficiency, rem oval of the trigger is frequently all that is required. In certain cases, blood transfusion an d haemodialysis may be necessary. Due to the observed increase in activity of enzyme by AG1, it can be considered in the treatment of G6PD deficiency. This drug can also be used in the prevention of complications that arise as a consequence of the deficiency. H owever, it was observed that AG1 was not able to activate the enzyme in certain kinds o f mutations. AG1 still is a novel class molecule that promotes activation in multiple patho genic mutants. (http://dx.doi.org/10.5195/ijms.2020.637)

* Apple Cider Vinegar-Mix plays the sound frequencies of acetic acid and polyphenolic c ompounds. The predominant phenolic compounds found in ACV include gallic acid, cate chin, epicatechin, chlorogenic acid, caffeic acid, and p-coumaric acid. Gallic acid, epicat echin and catechin have neuroprotective, anti-inflammatory and, immunomodulatory eff ects. Alongside ROS scavenging, ACV has anti-inflammatory potential; a study demonst rated the anti-inflammatory potential of ACV phenols on gastrointestinal cell inflammatio

n which involved downregulation of TNF and IL-6 cytokines. Overall, the effects of ACV i nclude enhanced muscle blood flow and glucose uptake in humans with impaired gluco se tolerance and hypertriglyceridemia, suggesting that vinegar may be considered bene ficial for improving insulin resistance and metabolic abnormalities. ACV exerts a cytotoxi c effect directly on pathogenic E. coli, S. aureus, and C. albicans. ACV can also decreas e induce inflammatory cytokine release during mononuclear leukocyte infection and incr ease the phagocytic function of monocytes. These effects are brought about by the mec hanisms which include alteration of microbial protein physiology, destruction of structura l pathogenic proteins and their metabolic enzymes. The presence of acetic acids in vine gar including ACV has been shown to inhibit the process of lipogenesis in the liver and i ncrease the amount of fecal bile acid excretion. Other mechanisms through which vineg ars are thought to modify lipid metabolism is through the inhibition of body fat accumulat ion by upregulating genes responsible for fatty acid oxidation enzymes in the liver. ACV can provide a unique functional effect on the body. Specifically, these include the manag ement of blood glucose levels, triglycerides, and cholesterol, promoting satiety, exerting a positive immune effect when in the body, antimicrobial effect when applied externally.

* AVPR1A Factor or vasopressin receptor 1A is one of the three major receptor types for vasopressin (AVPR1B and AVPR2 being the others), and is present throughout the brai n, as well as in the periphery in the liver, kidney, and vasculature. Clinically, the V1A rec eptor is related to vasoconstriction compared to the V1B receptor that is more related to ACTH release or the V2 receptor that is linked to the diuretic function of ADH. The activi ty / genetic variants of the AVPR1A gene might be related to narcissism and gentle beha vior. NatureNews has referred to AVPR1A as the "daring gene". The term "ruthlessness gene" has also been coined by Nature.com. A 2015 study found a correlation between A VPR1A expression and predisposition to extra-pair mating in women but not in men. Th ere are at least 3 types or versions of this gene that have been identified in human popu lation (called as polymorphism) . These gene variants differ in their lengths. The degree of greediness depends on the presence of one (or all) of these variants. For example, re searchers have shown that extremely selfish and greedy people have a shorter version of the ruthless gene (AVPR1a).

* Azadirachtin is a chemical compound belonging to the limonoid group, is a secondary metabolite present in neem seeds. It has a role as a hepatoprotective agent, insecticide, antimalarial.

* Cycloastragenol is a saponin comprising a group of oil glucosides naturally present in a number of plants. It is a potent telomerase activator in neuronal cells. A preliminary in vitro study on human CD4 and CD8 T cells found that cycloastragenol may moderately i ncrease telomerase activity and inhibit the onset of cellular senescence. Cycloastragen ol intake improved health span but not lifespan in normal mice. Toxicity testing is limited and safety for the human consumer has not been adequately demonstrated. TA-65 was shown to improve biological markers associated with human health span through the le ngthening of short telomeres and rescuing of old cells, although the significance of thes e findings in actual life expectancy is unknown. As disordered telomerase function is a f eature of almost all cancers, there is an unproven, but theoretical risk of oncogene-medi

ated cancer promotion through the use of telomerase activators.

* Defensamide promotes the generation of antimicrobial peptides (AMPs), an antibiotic element that exists in the body, thereby suppressing the germination of Staphylococcus inside the skin. Peptides strengthen a weakened skin defense system and, in particular, do not cause bacteria that are resistant to antibiotics.

* Eliapixant (BAY1817080), a P2X3 purinoreceptor antagonist, is intended to treat vario us disorders associated with hypersensitive nerve fibers, including endometriosis. The h ypothesis is that P2X3 receptor antagonism can inhibit cycles of pain causing neurogeni c inflammation, causing pain, etc. modifying the underlying disease in endometriotic lesi ons. Endometriosis is an area of significant unmet medical need but with a high bar for s afety. Eliapixant is highly potent and selective for P2X3 over other P2X subtypes in vitro, including P2X2/3. The molecule completed a phase I safety study and is in several ong oing phase II trials in different conditions including endometriosis (NCT04614246); other hypersensitive nerve fiber-associated disorders, including refractory or unexplained chro nic cough (RUCC); diabetic neuropathic pain (DNP) and overactive bladder (OAB). Elia pixant appears to significantly decrease cough frequency in patients with refractory chro nic cough.

* Galectin-9 is a protein is encoded by the LGALS9 gene. Galectin-9 in the blood could be responsible for the aggressive inflammatory response, known as cytokine storm, whi ch clinical evidence places as the main cause of death in patients with covid-19. In the p ast it had already been discovered that "galectin-9 levels increase in HIV infection and w ith some cancers", now scientists have found that in patients with covid-19 they were su bstantially higher. The team discovered that galectin-9 is responsible for instructing imm une cells to release pro-inflammatory cytokines rapidly in response to COVID-19 infectio n by binding to immune cells and forcing them to produce cytokines. Also, as tissues be come damaged as a result of inflammation, cells release more galectin-9, which activate s more immune cells and releases more cytokines in a vicious cycle. The resulting cytok ine storm damages tissues and organs, causes severe inflammation and can lead to de ath, explains the researcher. Even if patients survive the storm, the dysregulation of the immune system can have ongoing consequences, and could be associated with the con dition known as post-covid-19 syndrome or prolonged covid. Gal-9 is implicated in the r egulation of cellular proliferation and epithelial restitution after intestinal epithelial injury. The expression of galectin-9 has been detected on various hematological malignancies, such as CLL, MDS, Hodgkin and Non-Hodgkin lymphomas, AML or solid tumors, such a s lung cancer, breast cancer, and hepatocellular carcinoma. Galectin-9, through its cyto plasmic action in control of AMPK, may affect various health conditions impacted by AM PK, including metabolism, obesity, diabetes, cancer, immune responses, and may be a part of the mechanism of action of the widely-prescribed anti-diabetis drug metformin.

* Gallium maltolate is a novel oral agent in development for the potential treatment of ch ronic bacterial infections, bone disease and cancer. The compound is a potential therap eutic agent for cancer, infectious disease, and inflammatory disease. Gallium maltolate delivers gallium with higher oral bioavailability than that of gallium salts such as gallium

nitrate and gallium trichloride. In vitro studies have found gallium to be antiproliferative d ue primarily to its ability to mimic ferric iron (Fe3+). Ferric iron is essential for DNA synth esis, as it is present in the active site of the enzyme ribonucleotide reductase, which cat alyzes the conversion of ribonucleotides to the deoxyribonucleotides required for DNA. Gallium is taken up by the rapidly proliferating cells, but it is not functional for DNA synth esis, so the cells cannot reproduce and they ultimately die by apoptosis. Normally repro ducing cells take up little gallium (as is known from gallium scans), and gallium is not inc orporated into hemoglobin, accounting for the relatively low toxicity of gallium. Gallium (I II) ion shows anti-inflammatory activity in animal models of inflammatory disease. Orally administered gallium maltolate has demonstrated efficacy against two types of induced i nflammatory arthritis in rats. Experimental evidence suggests that the anti-inflammatory activity of gallium may be due, at least in part, to down-regulation of pro-inflammatory T-cells and inhibition of inflammatory cytokine secretion by macrophages. Because many i ron compounds are pro-inflammatory, the ability of gallium to act as a non-functional iro n mimic may contribute to its anti-inflammatory activity. Gallium maltolate has also been proposed for the treatment for primary liver cancer (hepatocellular carcinoma; HCC). In vitro experiments demonstrated efficacy against HCC cell lines, and encouraging clinica l results have been reported. Gallium compounds are active against infection-related bio films, particularly those caused by Pseudomonas aeruginosa. In related research, locall y administered gallium maltolate has shown efficacy against P. aeruginosa in a mouse b urn/infection model. The potential of this approach may be somewhat limited by the relat ively rapid appearance of gallium-resistant isolates. Oral gallium maltolate has been inv estigated as a treatment for Rhodococcus equi foal pneumonia, a common and often fat al disease of newborn horses. R. equi can also infect humans with AIDS or who are oth erwise immunocompromized. Topically applied gallium maltolate has been studied for u se in neuropathic pain (severe postherpetic neuralgia and trigeminal neuralgia). It has b een hypothesized that any effect on pain may be related to gallium's anti-inflammatory mechanisms, and possibly from its interactions with certain matrix metalloproteinases a nd substance P, whose activities are zinc-mediated and which have been implicated in t he etiology of pain.

* Kaolin or Montmorillonite Bentonite Clay is one of the most effective and powerful heal ing clays used to treat both internal and external maladies. Clinical studies repeatedly s how that clay may be an effective treatment for many medical issues. It is known to hav e antibacterial properties and is effective as a topical treatment for skin problems. Kaolin clay is also used to treat internal medical conditions in both humans and animals. Takin g the clay internally is contraindicated in some situations. It should not be used by those with a clinically diagnosed iron intolerance (a rare condition) without seeing a laborator y analysis of the clay used or blood sample monitoring. Use can cause a very temporary small spike in blood pressure. It should not be used internally with those who currently h ave high blood pressure, without proper supervision and other supportive treatment. Wh en used internally in conjunction with medications or herbal programs may lessen the ef fects of medications without careful administration (no less than 2 hours apart). It is not t o be taken internally concurrently with life-sustaining prescribed medications without ver y careful medical supervision. This clay appears to have antibacterial properties. Studie s confirm that E. coli and other bacterias die in the presence of medicinal clay. Montmori

llonite appears to significantly reduce the growth rate of deadly methacillin-resistant staphylococcus aureus bacteria, commonly known as MRSA. Other applications of this medicinal clay include taking it internally to soothe an upset stomach. It may also be helpful in the treatment of irritable bowel syndrome. In addition, the clay may absorb uric acid, as well as prevent cholesterol from being easily absorbed into the bloodstream from the intestine. Clay is used in chelation therapy to detoxify the body from poisonous heavy metals. Kaolin renders the harmful components inert and allows them to pass out naturally. Chelation therapy is sometimes reported as a good treatment for autism, but this claim does not have research to support it. Researchers have also studied the use of this type of clay on candidiasis and aflatoxicosis. When clay was taken internally, the Candida yeast causing the candidiasis was immobilized, suffocated, and eventually removed from the body.

* Margolone-Margolonone and isomargolonone are tri-cyclic diterpenoids isolated from neem stem bark. These compounds are active against Klebsiella, Staphylococcus and Serratia species which can inhibit bacterial growth and prevent wounds from getting secondarily infected.

* Maribavir is an antiviral medication that is used to treat post-transplant cytomegalovirus (CMV) infection/disease that does not respond (with or without genetic mutations that cause resistance) to available antiviral treatment for CMV. The most common side effects include taste disturbance, nausea, diarrhea, vomiting and fatigue. Maribavir is a cytomegalovirus pUL97 kinase inhibitor that works by preventing the activity of human cytomegalovirus enzyme pUL97, thus blocking virus replication. Maribavir is indicated to treat people twelve years of age and older and weighing at least 35 kilograms (77 lb) with post-transplant cytomegalovirus infection/disease that does not respond (with or without genetic mutations that cause resistance) to available antiviral treatment for cytomegalovirus. Maribavir may reduce the antiviral activity of ganciclovir and valganciclovir, so coadministration with these medications is not recommended. The U.S. Food and Drug Administration (FDA) granted the application for maribavir orphan drug, breakthrough therapy and priority review designations. CMV is a type of herpes virus that commonly causes infection in patients after a stem cell or organ transplant. CMV infection can lead to CMV disease and have a major negative impact on transplant recipients, including loss of the transplanted organ and death.

* Metronidazole is an antibiotic and antiprotozoal medication. It is used either alone or with other antibiotics to treat pelvic inflammatory disease, endocarditis, and bacterial vaginosis. It is effective for dracunculiasis, giardiasis, trichomoniasis, and amebiasis. Common side effects include nausea, a metallic taste, loss of appetite, and headaches. Occasionally seizures or allergies to the medication may occur. Some state that metronidazole should not be used in early pregnancy, while others state doses for trichomoniasis are safe. Metronidazole is generally considered compatible with breastfeeding. It is on the World Health Organization's List of Essential Medicines. Metronidazole is primarily used to treat: bacterial vaginosis, pelvic inflammatory disease (along with other antibacterials like ceftriaxone), pseudomembranous colitis, aspiration pneumonia, rosacea (topical), fungating wounds (topical), intra-abdominal infections, lung abscess, periodontitis, amoebia

sis, oral infections, giardiasis, trichomoniasis, and infections caused by susceptible ana erobic organisms such as Bacteroides, Fusobacterium, Clostridium, Peptostreptococcus, and Prevotella species. It is also often used to eradicate Helicobacter pylori along with other drugs and to prevent infection in people recovering from surgery. Common advers e drug reactions (≥1% of those treated with the drug) associated with systemic metronidazole therapy include: nausea, diarrhea, weight loss, abdominal pain, vomiting, headache, dizziness, and metallic taste in the mouth. Consuming alcohol while taking metronidazole has been suspected in case reports to cause a disulfiram-like reaction with effects that can include nausea, vomiting, flushing of the skin, tachycardia, and shortness of breath. Metronidazole is also generally thought to inhibit the liver metabolism of propylene glycol (found in some foods, medicines, and in many electronic cigarette e-liquids), thus propylene glycol may potentially have similar interaction effects with metronidazole. It also inhibits CYP2C9, so may interact with medications metabolised by these enzymes (e.g. lomitapide, warfarin).

* Nangibotide is an inhibitor of TREM-1, a receptor found on certain white blood cells. Activation of TREM-1 stimulates inflammation. Nangibotide is therefore being investigated as a treatment for the overwhelming inflammation typically seen in severe sepsis. Nangibotide, also referred as LR12, is an antagonist of triggering receptor expressed on myeloid cells (TREM)-1, and was derived from residues 94 to 105 of TREM-like transcript-1 (TLT-1). TREM-1 plays a crucial role in the onset of sepsis by amplifying the host immune response. TLT-1– and TLT-1–derived peptides therefore exhibit anti-inflammatory properties by dampening TREM-1 signalling. LR12 blocks TREM-1 by binding to the TREM-1 ligand and provides protective effects during sepsis such as inhibiting hyper-responsiveness, organ damage, and death, without causing deleterious effects. The protective effects of modulating TREM-1 signalling are also evident in other models of inflammation such as: pancreatitis; haemorrhagic shock; inflammatory bowel diseases and inflammatory arthritis. TREM-1 is a receptor found on neutrophils, macrophages and monocytes, key elements of the immune system. Activation of TREM-1 results in expression of NF-κB, which promotes systemic inflamm ation. Nangibotide inhibits TREM-1, thereby preventing the inflammatory activation. Abs ence of TREM-1 results in vastly reduced inflammation without impairing the ability to fig ht infection. Nangibotide has demonstrated safety in Phase 1 (healthy volunteers) and P hase 2 (sick patients with septic shock) studies. New pre-clinical studies with nangibotid e have demonstrated that the administration of nangibotide in murine models infected wi th SARS-CoV-2 was associated with a decrease in inflammatory mediators and an impr ovement of clinical signs, in particular respiratory function, and survival. Inotrem also co nfirmed in 3 different and independent cohorts that sTREM-1, a marker of the activation of the TREM-1 biological pathway, is associated with both severity and mortality in critic ally ill COVID-19 patients. TREM-1 pathway is an amplification loop of the immune resp onse that triggers an exuberant and hyperactivated immune state which is known to pla y a crucial role in the pathophysiology of septic shock and acute myocardial infarction. N angibotide is the formulation of the active ingredient LR12, which is a 12 amino-acid pep tide prepared by chemical synthesis. LR12 is a specific TREM-1 inhibitor, acting as a de coy receptor and interfering in the binding of TREM-1 and its ligand. In preclinical septic shock models, nangibotide was able to restore appropriate inflammatory response, vasc

ular function, and improved animals' survival post septic shock.

* Naronapride (free base), also known as ATI-7505, is a highly selective, high-affinity 5-HT(4) receptor agonist for gastrointestinal motility disorders. ATI-7505 accelerates overa ll colonic transit and tends to accelerate GE and AC emptying and loosen stool consiste ncy. A study found that the HT-5 4 receptor agonists were useful for treating a variety of diseases, such as gastroesophageal reflux disease, gastrointestinal disease, gastric mo tility disorder, non-ulcer dyspepsia, functional dyspepsia, irritable bowel syndrome, cons tipation, dyspepsia, esophagitis, gastroesophageal disease, nausea, postoperative intes tinal infarction, central nervous system disorders, Alzheimer's disease, cognitive disorde r, emesis, migraine, neurological disease, pain, cardiovascular disease, heart failure , ar rhythmias, intestinal pseudo-obstruction, gastroparesis, diabetes and apnea syndrome. Naronapride is a late-phase clinical stage drug candidate which possesses a unique co mbination of both serotonin 5HT4-receptor agonistic and dopamine D2-receptor antago nistic properties, both of which are clinically validated targets and work in both the upper and lower GI tract. Currently, the options to treat dysmotility disorders of the GI tract suc h as gastroparesis and other disorders such as IBS-c, GERD, and CIC, are limited.

* Pandulatin A boosts immunity strengthens defenses and nourishes the lungs.

* Pandulatin A-Pinostrobin can act to inhibit the growth of the virus that causes Covid-19. Both of these substances can reduce the number of infected cells from 100% to 0%.

* Pectolinarigenin can cure inflammatory diseases, it is an active anti-inflammatory and a dual inhibitor of cyclooxygenase-2 (COX-2) and 5-lipoxygenase (5-LOX). Pectolinarig enin promotes functional recovery and inhibits apoptosis following spinal cord injuries, w here Pectolinarigenin downregulated the activated caspase-3, caspase-9 and poly-AD P-ribose polymerase expression and reduced the Bax: Bcl2 ratio.

* Piclidenoson is an orally bioavailable, adenosine A3 receptor (A3AR) agonist with pote ntial anti-inflammatory activity. Upon administration, piclidenoson selectively targets, bin ds to and activates the cell surface-expressed A3AR, thereby activating transduction pat hways in which A3AR plays a key role. This inhibits nuclear factor-kappa B (NF-kB) sign aling and inhibits inflammatory cytokine production, such as tumor necrosis factor (TNF) and several interleukins. A3AR, a G protein-coupled receptor, plays a key role in many i nflammatory diseases, and in certain types of cancer. Piclidenoson is an anti-inflammat ory drug for rheumatoid arthritis patients. Its novel mechanism of action relies on antago nism of adenoside A3 receptors. Piclidenoson is supplied as an oral drug and has an ex cellent safety profile. It is also being considered for the treatment of other autoimmune-i nflammatory disorders, such as Crohn's disease, psorasis and dry eye syndrome. As an oral drug with an excellent safety profile in human clinical trials, Piclidenoson may offer a much needed, safe, and effective treatment for canine osteoarthritis. Investigated for u se/treatment in cancer/tumors (unspecified), eye disorders/infections, psoriasis and psor iatic disorders, and rheumatoid arthritis. By targeting the adenosine A3-receptor, Piclide noson may also be used to treat Crohn's disease, a serious gastrointestinal disorder.

* Pinostrobin is a flavonoid which can be found in many plants, and has anti-oxidant, ant i-inflammatory, anti-cancer and neuroprotective properties. Pinostrobin is a potent PCS K9 inhibitor and inhibits the catalytic activity of PCSK9. Pinostrobin is a promising agent for cholesterol regulation and lipid management.

* Rabeximod is a well-tolerated, orally available Phase 2 immunomodulator drug candid ate that selectively targets the inflammatory macrophage - the central orchestrator of th e inflammatory process. Rabeximod is currently being developed as a potential treatme nt of rheumatoid arthritis and moderate Covid-19, two diseases that are driven by harmf ul inflammatory processes. Rabeximod is indicated for RA and other autoimmune disea se and neuroinflammation. Rabeximod is differentiated from current therapies by suppre ssing a population of inflammatory cells central to the structural damage of the joints whi ch occurs in RA.

* Regdanvimab (CT-P59) is a human monoclonal antibody used for the treatment of CO VID-19. The most common side effects include infusion-related reactions, including aller gic reactions and anaphylaxis. Regdanvimab is a monoclonal antibody targeted against the SARS-CoV-2 spike protein used to treat patients with COVID-19 who are at risk of p rogressing to severe COVID-19. Regdanvimab (CT-P59) is a recombinant human IgG1 monoclonal antibody directed at the receptor binding domain (RBD) of the SARS-CoV-2 spike protein. It blocks the interaction between viral spike proteins and angiotensin-conv erting enzyme 2 (ACE2) that allows for viral entry into the cell, thereby inhibiting the viru s' ability to replicate. Trials investigating the use of regdanvimab as a therapeutic candid ate for the treatment of COVID-19 began in mid-2020. It received its first full approval in South Korea in September 2021, followed by the EU in November 2021. The EC grante d marketing authorisation for adults with COVID-19 who do not require supplemental ox ygen and who are at increased risk of progressing to severe COVID-19.

* Relcovaptan (SR-49059) is a non-peptide vasopressin receptor antagonist, selective f or the V1a subtype. It has shown positive initial results for the treatment of Raynaud's di sease and dysmenorrhoea, and as a tocolytic, although it is not yet approved for clinical use. A clinically safe and selective AVPR1A antagonist, relcovaptan, prevented castratio n-resistant prostate cancer CRPC emergence and decreased CRPC orthotopic and bon e metastatic growth in mouse models. Based on these preclinical findings, repurposing AVPR1A antagonists is a promising therapeutic approach for CRPC. Relcovaptan is a n on-peptide, orally active vasopressin V 1A / oxytocin antagonist. Its affinity towards vaso pressin V 1A receptors is higher as compared with oxytocin receptors. Since it can be a dministered orally it can be used in patients with dysmenorrhoea or for prophylactic / ma intenance treatment of pre-term labour sufferers. Relcovaptan was shown to decrease myometrial contractions in vitro as well as in vivo. In clinical study on pre-term labour pa tients, it significantly decreased uterine contractions as compared with placebo. Being p redominantly vasopressin V 1A antagonist, relcovaptan has recently been tested in ani mal models of congestive heart failure.

* RGFP-966 is a brain-penetrant and selective HDAC3 inhibitor. In HEK-293 cells overe xpressing APP with Swedish mutation (HEK/APPSW), RGFP-966 (10mM, 48 h) increas

ed histone H3 and H4 acetylation and decreased p-tau. In the 3xTg AD mouse model, r epeated administration of RGFP-966 (3 and 10 mg/kg) reversed pathological tau phosp horylation in the brain and improved spatial learning and memory. Furthermore, in prima ry neurons derived from iPSCs obtained from AD patients, RGFP-966 decreased tau ac etylation in patient 1 with no effect on tau phosphorylation, whereas it decreased tau hy perphosphorylation in patient 2 with no effect on tau acetylation. Larger follow-up studie s are required to elucidate this finding. Used for tauopathies in neurodegenerative disea ses.

* Rimegepant is a small molecule calcitonin gene-related peptide (CGRP) receptor anta gonist. Rimegepant is a medication for the acute treatment of migraine with or without a ura in adults and preventative treatment of episodic migraine in adults. Rimegepant can provide relief from migraine headache for up to 48 hours. It works by blocking CGRP re ceptors.

* Sevoflurane is one of the most commonly used volatile anesthetic agents, particularly f or outpatient anesthesia, across all ages, as well as in veterinary medicine. Sevoflurane has an excellent safety record, but is under review for potential hepatotoxicity, and may accelerate Alzheimer's. There were rare reports involving adults with symptoms similar t o halothane hepatotoxicity. Sevoflurane is the preferred agent for mask induction due to its lesser irritation to mucous membranes. Sepsis is one of the leading causes of mortali ty in intensive care units, and sedation in the intensive care unit during sepsis is usually performed intravenously. Although inhaled sevoflurane is reported to have anti-inflamma tory effects, its role in laboratory models is not well characterized. In two murine peritoni tis-induced sepsis models, sevoflurane reduced peritoneal lavage neutrophil counts by l ower adhesion molecule expression, reduced cytokines, and protein extravasation. The mechanism of these reported protective effects was due to the expression of hypoxia-in ducible factor 1alpha and adenosine A2B receptor in the intestine, liver, and lung.

* Sildenafil is a medication used to treat erectile dysfunction and pulmonary arterial hyp ertension. It is unclear if it is effective for treating sexual dysfunction in women. Commo n side effects include headaches, heartburn, and flushed skin. Caution is advised in tho se with cardiovascular disease. Rare but serious side effects include a prolonged erecti on (priaprism) that can lead to damage to the penis, vision problems, and hearing loss. Sildenafil should not be taken by people on nitrates such as nitroglycerin (glycerin trinitr ate), as this may result in a serious drop in blood pressure. Sildenafil should not be take n within four hours of taking an alpha one antagonist. Sildenafil acts by blocking phosph odiesterase 5 (PDE5), an enzyme that promotes breakdown of cGMP, which regulates b lood flow in the penis. It requires sexual arousal, however, to work. It also results in dilati on of the blood vessels in the lungs. Sildenafil and other PDE5 inhibitors are used off-la bel to alleviate vasospasm and treat severe ischemia and ulcers in fingers and toes for people with secondary Raynaud's phenomenon. Sildenafil reduced the likelihood of Alzh eimer's in people with coronary artery disease, hypertension, and type 2 diabetes, all of which are comorbidities significantly associated with risk of the disease. Care should be exercised by people who are also taking protease inhibitors for the treatment of HIV infe ction. Protease inhibitors inhibit the metabolism of sildenafil, effectively multiplying the pl

asma levels of sildenafil, increasing the incidence and severity of side effects. Those usi ng protease inhibitors are recommended to limit their use of sildenafil. Other drugs that i nterfere with the metabolism of sildenafil include erythromycin and cimetidine, both of w hich can also lead to prolonged plasma half-life levels. The use of sildenafil and an alph a1 blocker (typically prescribed for hypertension or for urologic conditions, such as beni gn prostatic hypertrophy) at the same time may lead to low blood pressure, but this effe ct does not occur if they are taken at least 4 hours apart. Sildenafil should not be used if sexual activity is inadvisable due to underlying cardiovascular risk factors.

* SIRT6 Activators. In the search for ways to effectively combat age-related human dise ase, the enzyme sirtuin 6 (Sirt6) has recently become a focus of biochemical research. A targeted activation of Sirt6 could prevent or mitigate such diseases, for example some types of cancer. MDL-800 and MDL-801 increased SIRT6 deacetylation activity, with EC 50 values of 10.3 ± 0.3 μ M and 5.7 ± 0.3 μ M, respectively, and both molecules dramatically enhanced SIRT6 deacetylation activity by more than 22-fold at 100 μ M.

* Tianagliflozin is a novel sodium/glucose cotransporter 2 (SGLT-2) inhibitor potentially for the treatment of type 2 diabetes.

* XEN901 is a potent, selective Nav1.6 sodium channel inhibitor for the treatment of epilepsy, including treatment resistant adult focal seizures and rare, pediatric forms of epilepsy, such as EIEE13, an early infantile epileptic encephalopathy associated with mutations in the SCN8A gene and gain-of-function in the Nav1.6 sodium channel. Non-selective sodium channel blockers, such as phenytoin, carbamazepine, lacosamide, and lamotrigine, have been the mainstay of treatment of patients with focal seizures for decades. However, these non-selective sodium channel blockers also inhibit other channels, leading to well recognized side effects associated with their use, limiting dose titration required to achieve maximal efficacy. XEN901 is the first highly selective blocker of Nav1.6, the most abundantly expressed sodium channel in the neuroexcitatory pathways in the central nervous system. XEN901 selective inhibition the Nav1.6 channel brings robust clinical efficacy along with an improved safety profile.

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Augmentin; Aztreonam; Clematis Root-Mix; Cyclobenzaprine; Daridorexant; DeC-1.2 Pe ptide; Deoxygedunin; Diatomaceous Earth; Gut Health-Mix; Interstitial Cystitis-Mix1; Inte rstitial Cystitis-Mix2; Interstitial Cystitis-Mix3; Lugol Iodine; Lupeol; Maresin-1; Mepartrici n; Midodrine; Oxytetracyline; Prebiotics Mix; RG-7112-O-Vanillin; SAMe; Taurolidine; Te ndinopathy-Mix; Tixagevimab-Cilgavimab; Tolperisone; Urinary Bladder Mix1; Urinary Bl adder-Mix2; Urinary Bladder-Mix3; Velusetrag; Zetomipzomib

* Augmentin or amoxicillin/clavulanic acid, also known as co-amoxiclav or amox-clav, is an antibiotic medication used for the treatment of a number of bacterial infections. It is a

combination consisting of amoxicillin, a beta-lactam antibiotic, and potassium clavulanat e, a beta-lactamase inhibitor. It is specifically used for otitis media, streptococcal pharyn gitis, pneumonia, cellulitis, urinary tract infections, and animal bites. Common side effect s include diarrhea, vomiting, and allergic reactions. It also increases the risk of yeast inf ections, headaches, and blood clotting problems. It is not recommended in people with a history of a penicillin allergy. It is relatively safe for use during pregnancy. Amoxicillin/cl avulanic acid is widely used to treat or prevent many infections caused by susceptible b acteria, such as: urinary tract infections, respiratory tract infections, skin and soft tissue i nfections, sinus infections, tonsillitis, cat scratches, infections caused by the bacterial flo ra of the mouth, such as: dental infections, infected animal bites, infected human bites (i ncluding uncomplicated "clenched-fist" or "reverse-bite" injuries).

* Aztreonam is an antibiotic used primarily to treat infections caused by gram-negative b acteria such as Pseudomonas aeruginosa. This may include bone infections, endometrit is, intra abdominal infections, pneumonia, urinary tract infections, and sepsis. Common side effects when given by injection include pain at the site of injection, vomiting, and ra sh. Common side effects when inhaled include wheezing, cough, and vomiting. Serious side effects include Clostridium difficile infection and allergic reactions including anaphyl axis. Those who are allergic to other beta-lactam have a low rate of allergy to aztreona m. Use in pregnancy appears to be safe. It is in the monobactam family of medications. Aztreonam inhibits cell wall synthesis by blocking peptidoglycan crosslinking to cause b acterial death. Nebulized forms of aztreonam are used to treat infections that are compli cations of cystic fibrosis and are approved for such use in Europe and the US; they are also used off-label for non-CF bronchiectasis, ventilator-associated pneumonia, chronic obstructive pulmonary disease, mycobacterial disease, and to treat infections in people who have received lung transplants. Aztreonam has strong activity against susceptible Gram-negative bacteria, including Pseudomonas aeruginosa. It is resistant to some bet a-lactamases, but is inactivated by extended-spectrum beta-lactamases. It has no usefu l activity against Gram-positive bacteria or anaerobes. It is known to be effective against a wide range of bacteria including Citrobacter, Enterobacter, E. coli, Haemophilus, Klebs iella, Proteus, and Serratia species. Acinetobacter anitratus, Escherichia coli, Pseudom onas aeruginosa, and Proteus mirabilis are generally susceptible to aztreonam, while so me staphylococci, Staphylococcus aureus, Staphylococcus haemolyticus and Xanthom onas maltophilia are resistant to it. Furthermore, Aeromonas hydrophila, Citrobacter kos eri (Citrobacter diversus), Pantoea agglomerans (Enterobacter agglomerans), Haemoph ilus spp. and Streptococcus pyogenes have developed resistance to aztreonam to varyi ng degrees. Aztreonam is often used in people who are penicillin allergic or who cannot tolerate aminoglycosides.

* Clematis Root Mix (wei ling xian) acts on urinary bladder channel and migrating to 12 channels and collaterals. The mix has a strong action to eliminate wind-dampness, clea ring stasis in channels to relieve arthralgia. Used for rheumatic arthralgia, joint pain, nu mbness of extremities. Also used for dislodging and passing through the throat stuck fis hbones in the pharynx where it does eliminate the phlegm and softens stuck fish bones, thus eventually leaving to the stomach acids dissolve the fish bone. If a fish bone is swa llowed and it passes through the throat, that means it is small and can be digested. As t

he mix tends to cause inpairment to vital energy, it should not be used for long periods o f time. The recording plays the sound frequencies of anemonin, protoanemonin, prosap ogenin (CP11) and, aristolochic acid.

* Cyclobenzaprine is a centrally acting muscle relaxant closely related to the tricyclic ant idepressants. Despite its similarity to tricyclic antidepressants, there is little evidence tha t cyclobenzaprine causes liver injury. Cyclobenzaprine is a centrally acting skeletal mus cle relaxant with antidepressant activity. The exact mechanism of action of cyclobenzapr ine has not been fully determined, but this drug seems to primarily act at the brain stem to reduce tonic somatic motor activity, influencing both gamma and alpha motor neurons leading to a reduction in muscle spasms. Cyclobenzaprine is 5-Methylidene-5H-dibenzo [a,d]cycloheptene in which one of the hydrogens of the methylidene group is substituted by a 2-(dimethylamino)ethyl group. It has a role as a muscle relaxant, a tranquilizing dru g and an antidepressant. It derives from a hydride of a dibenzo[a,d]annulene. Common side effects include headache, feeling tired, dizziness, and dry mouth. Serious side effec ts may include an irregular heartbeat. Agitation is a common side effect observed, espe cially in the elderly. In general, the National Committee for Quality Assurance recommen ds avoiding the use of cyclobenzaprine in the elderly because of the potential for more s evere side effects. Dysphagia, a life-threatening side-effect, may rarely occur. Treatment protocols and support should follow the same as for any structurally related tricyclic, suc h as tricyclic antidepressants.There is no evidence of harm in pregnancy, but it has not been well studied in this population. It should not be used with a MAO inhibitor. Cyclobe nzaprine is used to treat such muscle spasms associated with acute, painful musculosk eletal conditions. It decreases pain in the first two weeks, peaking in the first few days, b ut has no proven benefit after two weeks. Since no benefit is proven beyond that, therap y should not be continued long-term. It is the best-studied muscle relaxer. It is not useful for spasticity due to neurologic conditions such as cerebral palsy. The sedative effects o f cyclobenzaprine are likely due to its antagonistic effect on histamine, serotonin, and m uscarinic receptors. These substances may interact with cyclobenzaprine: Central nervo us system depressants (e.g. alcohol, opioids, benzodiazepines, nonbenzodiazepines, p henothiazines, carbamates, barbiturates, major tranquilizers.) Monoamine oxidase inhibi tors taken within two weeks of cyclobenzaprine may result in serious, life-threatening sid e effects. Cyclobenzaprine may affect the medications used in surgical sedation and so me surgeons request that patients temporarily discontinue its use prior to surgery. Cyclo benzaprine is a 5-HT2 receptor antagonist; it relieves muscle spasm through action on t he central nervous system at the brain stem, rather than targeting the peripheral nervou s system or muscles themselves.

* Daridorexant is a medication used for the treatment of insomnia. The medication has a relatively short elimination half-life of 6 to 10 hours. As of April 2020, daridorexant has p assed its first phase III clinical trial for the treatment of insomnia. Daridorexant was appr oved for medical use in the United States in January 2022. Daridorexant, formerly know n as nemorexant, is a selective dual orexin receptor antagonist used to treat insomnia. I nsomnia is characterized by difficulties with sleep onset and/or sleep maintenance and i mpairment of daytime functioning. It chronically affects the person’s daily functioning an d long-term health effects, as insomnia is often associated with comorbidities such as h

ypertension, diabetes, and depression. Conventional treatments for insomnia include dr ugs targeting gamma-aminobutyric acid type-A (GABA-A), serotonin, histamine, or mela tonin receptors; however, undesirable side effects are frequently reported, such as next-morning residual sleepiness, motor incoordination, falls, memory and cognitive impairm ent. Novel drugs that target orexin receptors gained increasing attention after discoverin g the role of orexin signalling pathway in wakefulness and almorexant, an orexin recept or antagonist that improved sleep. Daridorexant was designed via an intensive drug disc overy program to improve the potency and maximize the duration of action while minimi zing next-morning residual activity. Daridorexant works on orexin receptors OX1R and OX2R to block the binding of orexins, which are wake-promoting neuropeptides and end ogenous ligands to these receptors. Daridorexant reduces overactive wakefulness: in th e investigational trials, daridorexant reportedly improved sleep and daytime functioning i n patients with insomnia.

* DeC-1.2 Peptde (CRRDRARHYRQRC) can specifically inhibit the ligand activation of TRPM8 but not the cold activation as measured in single-channel patch clamp recording s. The discoverer of TRPM8 and other temperature-sensing TRP channels won the Nob el Prize in Physiology or Medicine in 2021. TRPM8 is a non-selective cation channel hig hly expressed in nociceptive neurons. As this channel is activated at temperature lower t han 28 °C, it is a sensor for coolness in mammalians. Moreover, TRPM8 is a polymodal receptor also activated by chemical ligands such as menthol and icilin, as well as memb rane depolarization. DeC-1.2 abolishes cold allodynia in oxaliplatin treated mice without altering body temperature. The transient receptor potential melastatin 8 (TRPM8) ion ch annel is critically involved in the pathogenesis of oxaliplatin-induced cold allodynia. In th e mouse model of oxaliplatin-induced cold allodynia, the expression level of TRPM8 cha nnel in the nociceptive dorsal root ganglion (DRG) neurons is significantly elevated. Tho ugh there is no peptide toxin targeting TRPM8 channel identified from venomous animal s, many small molecules have been screened and developed as TRPM8 inhibitors. Mos t of these inhibitors non-discriminatively suppress all modes of TRPM8 activation, so the y often cause hypothermia and changes in acute cold sensation in patients and thus fail ures in clinical trials. To address such limitations in pan-mode inhibitors, one of the effec tive strategies is to develop modality-specific TRPM8 inhibitors such as DeC-1.2 Peptde that spares cold activation of this channel.
(https://doi.org/10.1002/advs.202101717)

* Deoxygedunin has been found to act as a potent, selective, small-molecule agonist of TrkB, the main receptor of brain-derived neurotrophic factor (BDNF). It produces TrkB-d ependent neurotrophic and neuroprotective effects in mice and enhances learning proce sses. In addition, deoxygedunin evokes rapid TrkB-dependent antidepressant-like effect s in the forced swim test, an animal model of depression, similarly to 7,8-dihydroxyflavo ne (7,8-DHF) and ketamine. Deoxygedunin has been found to activate HSF1 and induc e Hsp70, and was observed to possess neuroprotective effects in a model of Huntingto n's disease.

* Diatomaceous Earth (Silicon Dioxide or SiO2) is a type of powder made from the sedi ment of fossilized algae found in bodies of water. Because the cells of these algae were

high in a compound called silica, the dried sediment produced from these fossils are als o very high in silica. These deposits are found all over the world. Silicon dioxide helps to maintain healthy, strong bones, heal bone fractures, avoid bone deformities, and ward o ff the onset of osteoporosis. It also helps with peripheral neuropathy. These benefits are mostly attributed to its ability to allow the body to absorb more fully nutrients like calcium and vitamins. The US Food and Drug Administration has recognized silicon dioxide as s afe for human consumption and the European Food Safety Authority (EFSA) has, as we ll. In fact, the World Health Organization has recorded that the biggest danger caused b y silicon dioxide is a deficiency of the substance.

* Gut Health-Mix.
-Psyllium is mainly used as a dietary fiber to relieve symptoms of both constipation and mild diarrhea, and occasionally as a food thickener. Allergy to psyllium is common. Use of psyllium in the diet for three weeks or longer often lowers blood cholesterol levels in p eople with elevated cholesterol, and can lower blood glucose levels in people with type 2 diabetes. Use of psyllium for a month or longer may produce a small reduction in syst olic blood pressure.
-Inulin is a prebiotic fiber present in the roots and rhizomes of various plants. Inulin is a naturally indigestible and non-absorbable oligosaccharide with prebiotic and potential an ticancer activity. Inulin stimulates the growth of beneficial bacteria in the colon, including Bifidobacteria and Lactobacilli, thereby modulating the composition of microflora. This cr eates an environment that protects against pathogens, toxins and carcinogens, which c an cause inflammation and cancer. In addition, fermentation of inulin leads to an increas e in short-chain fatty acids and lactic acid production, thereby reducing colonic pH, whic h may further control pathogenic bacteria growth and may contribute to inulin's cancer p rotective properties. Inulin has demonstrated effectiveness in improving transit time, sto ol frequency, stool consistency, and hardness of stool. -Phenylalanine-butyramide–also known as FBA–is an innovative delivery system that helps increase butyrate in the bloodstream and has been shown in studies to be an effective anti-inflammatory agent. Butyrate is an important molecule for building gut health. Butyrate, is a primary short-chain fatty acids (SCFAs) that microbes produce when they contribute to the fermentation of non-digestible fibers and resistant starches. A number of research papers have supported its ability to aid in promoting satiety and blood sugar and blood lipid management, as well as their anti-inflammatory (especially regarding inflammatory bowel diseases), antioxidant, and even anti-cancer abilities.

* Interstitial Cystitis Mix features specific compounds such as proanthocyanidin, acemannan, asiatic acid, asiaticoside, madecassic acid (mp3-1) L-arginine, valeranone, didrovaltrate (mp3-2) quercetin, bromelain, papain (mp3-3). The goal is to alleviate and reverse the condition.

* Lugol Iodine, also known as aqueous iodine and strong iodine solution, is a solution of potassium iodide with iodine in water. It is a medication and disinfectant used for a number of purposes. Taken by mouth it is used to treat thyrotoxicosis until surgery can be carried out, protect the thyroid gland from radioactive iodine, and to treat iodine deficiency. As a disinfectant it may be applied to small wounds such as a needle stick

injury. A small amount may also be used for emergency disinfection of drinking water. Side effects may include allergic reactions, headache, vomiting, and inflammation of the whites of the eyes. Long term use may result in trouble sleeping and depression. It should not typically be used during pregnancy or breastfeeding. Lugol's iodine is a liquid made up of two parts potassium iodide for every one part elemental iodine in water.

* Lupeol is a pharmacologically active pentacyclic triterpenoid. It has several potential medicinal properties, like anticancer and anti-inflammatory activity. Lupeol has a complex pharmacology, displaying antiprotozoal, antimicrobial, antiinflammatory, antitumor and chemopreventive properties. Animal models suggest lupeol may act as an anti-inflammatory agent. A 1998 study found lupeol to decrease paw swelling in rats by 39%, compared to 35% for the standardized control compound indomethacin. One study has also found some activity as a Dipeptidyl peptidase-4 inhibitor and prolyl oligopeptidase inhibitor at high concentrations (in the millimolar range). It is an effective inhibitor in laboratory models of prostate and skin cancers. As an anti-inflammatory agent, lupeol functions primarily on the interleukin system. Lupeol decreases IL-4 (interleukin 4) production by T-helper type 2 cells. Lupeol has been found to have a contraceptive effect due to its inhibiting effect on the calcium channel of sperm (CatSper). Lupeol has also been shown to exert anti-angiogenic and anti-cancer effects via the downregulation of TNF-alpha and VEGFR-2. Lupeol demonstrated the most favorable docking affinity towards the main protease (MPRO) achieving scores of -70.03, interestingly the antiretroviral protease inhibitor drugs lopinavir and ritonavir, shown in some studies to be effective against COVID-19, achieved scores of only -50.25 and -68.58 kcal/mol, respectively.

* Maresin-1 alleviates cardiac injury and protects against cardiac dysfunction and may be beneficial in reducing sepsis-induced cardiac injury. Maresin 1 promotes nerve regeneration and alleviates neuropathic pain after nerve injury. Also, Maresin-1 (MaR1) a derivative of omega-3 docosahexaenoic acid (DHA) has been shown to prevent the inflammation of hepatocytes and increase the phagocytic activity of Kupffer cells. In addition to resolvins and protectins, the maresins are a structurally distinct family of compounds in the DHA metabolome. Maresins are biosynthesized by macrophages that are critically important in restoring tissue homeostasis after inflammation. Maresin 1 is a powerful regulator of resolution of inflammation, tissue regeneration and pain likewise, with effects upon many disease states including lung, vascular and metabolic diseases, and bacterial infections.

* Mepartricin is a macrolide polyene compound that is useful for urethra, prostate, and bladder function. It has been studied for use in treating chronic pelvic pain syndrome and benign prostatic hyperplasia. Mepartricin is estrogen reabsorption inhibitor that may interfere with the reabsorption of estrogens in the gut leading to increased fecal estrogen excretion. It reduces 17beta-estradiol concentration in enterohepatic circulation and decreases estrogen levels in the prostate. The effect of mepartricin on the reabsorption of estrogens was evaluated in studies in vitro and in vivo. Mepartricin significantly improves pelvic pain and quality of life compared with the results in placebo group after two months of treatment. Regarding to the theory that hormonal disorders

could promote prostatic inflammation, mepartricin, that can lower estrogen levels in prostate, is effective drug in the treatment of patients with chronic pelvic pain syndrome and is referred in 2015 World Journal Pharmacology Updates on therapies for chronic prostatitis/chronic pelvic pain syndrome.

* Midodrine is a vasopressor/antihypotensive agent. It is indicated for the treatment of symptomatic orthostatic hypotension. It can reduce dizziness and faints by about a third, but can be limited by troublesome goose bumps, skin itch, gastrointestinal discomfort, chills, elevated blood pressure while lying down, and urinary retention. A meta-analysis of clinical trials of midodrine or droxidopa in patients with low blood pressure when standing found that midodrine increased standing blood pressure more than droxidopa but that midodrine but not droxidopa increased the risk of high blood pressure when lying down. Small studies have also shown that midodrine can be used to prevent excessive drops in blood pressure in people requiring dialysis. Midodrine has been used in the complications of cirrhosis. It is also used with octreotide for hepatorenal syndrome; the proposed mechanism is constriction of splanchnic vessels and dilation of renal vasculature. Midodrine is contraindicated in patients with severe organic heart disease, acute kidney disease, urinary retention, pheochromocytoma or thyrotoxicosis. Midodrine should not be used in patients with persistent and excessive supine hypertension. Posible side effects include headache, feeling of pressure/fullness in the head, vasodilation/flushing face, scalp tingling, confusion/thinking abnormality, dry mouth, nervousness/anxiety and rash.

* Oxytetracycline, like other tetracyclines, is used to treat many infections, both common and rare. Its better absorption profile makes it preferable to tetracycline for moderately severe acne at a dosage of 250–500 mg four times a day for usually six to eight weeks at a time, but alternatives should be sought if no improvement occurs by three months. It is sometimes used to treat spirochaetal infections, clostridial wound infection and anthrax in patients sensitive to penicillin. Oxytetracycline is used to treat infections of the respiratory and urinary tracts, skin, ear, eye and gonorrhoea, although its use for such purposes has declined in recent years due to large increases in bacterial resistance to this class of drugs. The drug is particularly useful when penicillins and/or macrolides cannot be used due to allergy. It may be used to treat Legionnaire's disease as a substitute for a macrolide or quinolone. Oxytetracycline is especially valuable in treating nonspecific urethritis, Lyme disease, brucellosis, cholera, typhus, tularaemia. and infections caused by Chlamydia, Mycoplasma and Rickettsia. Doxycycline is now preferred to oxytetracycline for many of these indications because it has improved pharmacologic features. Side effects are mainly gastrointestinal and photosensitive allergic reactions common to the tetracycline antibiotics group. It can also damage calcium-rich organs, such as teeth and bones, although this is very rare. It sometimes causes nasal cavities to erode; quite commonly, the BNF suggests, because of this, tetracyclines should not be used to treat pregnant or lactating women and children under 12 except in certain conditions where it has been approved by a specialist because there are no obvious substitutes. Candidiasis (thrush) is not uncommon following treatment with broad-spectrum antibiotics.

* Prebiotics Mix. Neokestose as well as many other fructooligosaccharides belong to the prebiotics, i.e. to the substances that have a positive effect on the intestinal microbiome after consuming them in food. In particular, the consumption of neokestose mixed with other fructooligosaccharides increases the concentration of healthy probiotic bifidobacteria and decreases the concentration of the Clostridia, bacteria associated with inflammatory processes.
N-Acetyllactosamine (LacNAc) (also known as CD75) is a nitrogen-containing disaccharide. The N-acetyllactosamine is a component of many glycoproteins and functions as a carbohydrate antigen that is thought to play roles in normal cellular recognition as well as in malignant transformation and metastasis. It is also found in the structure of human milk oligosaccharides and has prebiotic effects. Levan is a naturally occurring fructan present in many plants and microorganism species. In the food industry, levan is incorporated due to its prebiotic effects, cholesterol lowering ability, and adhesion ability.

* RG-7112-O-Vanillin. RG-7112, is a synthetic drug that has been approved for safety by the US Food and Drug Administration and has been shown to remove senescent cells. The other, o-Vanillin, is a natural compound that has anti-inflammatory and anti-senescence properties. The results showed that both compounds were able to trigger changes to that helped new, healthy cells to grow and at the same time kill senescent cells. They also reduced the production of molecules linked to inflammation and pain. Further analyses revealed that the compounds were able to strengthen the fibrous matrix that surrounds and supports the spinal discs. Cherif et al. hope that this could form the basis for a new family of drugs for back pain to slow the degeneration of the discs and reduce pain. This may also have benefits for other similar degenerative diseases caused by cell senescence, such as arthritis.
(doi: 10.7554/eLife.54693)

* SAM-e is a molecule that is formed naturally in the body. It can also be made in the laboratory. SAMe is involved in the formation, activation, or breakdown of other chemicals in the body, including hormones, proteins, phospholipids, and certain drugs. SAMe has been available as a dietary supplement in the US since 1999, but it has been used as a prescription drug in Italy since 1979, in Spain since 1985, and in Germany since 1989. SAMe is used by for depression, anxiety, heart disease, fibromyalgia, abdominal pain, osteoarthritis, bursitis, tendonitis, chronic lower back pain, dementia, Alzheimer's disease, slowing the aging process, chronic fatigue syndrome (CFS), improving mental performance, liver disease, and Parkinson's disease. It is also used for attention deficit-hyperactivity disorder (ADHD), multiple sclerosis, spinal cord injury, seizures, migraine headache, lead poisoning, to break down a chemical in the body called bilirubin, or to help with disorders related to the buildup of a chemical called porphyrin or its precursors. Some women take SAMe for premenstrual syndrome (PMS) and a more severe form of PMS called premenstrual dysphoric disorder (PMDD). SAMe is used intravenously (by IV) for depression, osteoarthritis, AIDS-related nervous system disorders, fibromyalgia, liver disease, cirrhosis, and for a liver disorder that occurs in pregnant women called intrahepatic cholestasis. SAMe is injected as a shot for fibromyalgia, depression, and Alzheimer's disease. The body uses SAMe to make

certain chemicals in the body that play a role in pain, depression, liver disease, and other conditions. People who don't make enough SAMe naturally may be helped by taking SAMe as a supplement. It can sometimes cause gas, vomiting, diarrhea, constipation, dry mouth, headache, mild insomnia, anorexia, sweating, dizziness, and nervousness, especially at higher doses. It can also make some people with depression feel anxious. S-adenosyl-L-methioninate is a sulfonium betaine that is a conjugate base of S-adenosyl-L-methionine obtained by the deprotonation of the carboxy group. It has a role as a human metabolite. It derives from a L-methioninate. It is a conjugate base of a S-adenosyl-L-methionine. Taking SAM at the same time as some drugs may increase the risk of serotonin syndrome, a potentially dangerous condition caused by having too much serotonin. These drugs include dextromethorphan (Robitussin), meperidine (Demerol), pentazocine (Talwin), and tramadol (Ultram). SAM may also interact with antidepressant medications — including tryptophan and Hypericum perforatum (St. John’s wort) — increasing the potential for serotonin syndrome or other side effects, and may reduce the effectiveness of levodopa for Parkinson's disease. People who have bipolar disorder should not use SAM because it increases the risk of manic episodes.

* Taurolidine is an antimicrobial that is used to try to prevent infections in catheters. Side effects and the induction of bacterial resistance is uncommon. It is also being studied as a treatment for cancer. It is derived from the endogenous amino acid taurine. Taurolidine’s putative mechanism of action is based on a chemical reaction. During the metabolism of taurolidine to taurinamide and ultimately taurine and water, methylol groups are liberated that chemically react with the mureins in the bacterial cell wall and with the amino and hydroxyl groups of endotoxins and exotoxins. This results in denaturing of the complex polysaccharide and lipopolysaccharide components of the bacterial cell wall and of the endotoxin and in the inactivation of susceptible exotoxins. Catheter lock solution in home parenteral nutrition (HPN) or total parenteral nutrition (TPN): catheter-related blood stream infections (CRBSI) remains the most common serious complication associated with long-term parenteral nutrition. The use of taurolidine as a catheter lock solution shows a reduction of CRBSI. The overall quality of the evidence however is not strong enough to justify routine use. Catheter lock solution: Taurolidine decreases the adherence of bacteria and fungi to host cells by destructing the fimbriae and flagella and thus prevent the biofilm formation. Taurolidine is the active ingredient of antimicrobial catheter lock solutions for the prevention and treatment of catheter related bloodstream infections (CRBSIs) and is suitable for use in all catheter based vascular access devices. Bacterial resistance against taurolidine has never been observed in various studies. The use of a taurolidine lock solution may decrease the risk of catheter infection in children with cancer but the evidence is tentative. No systemic side effects have been identified. The safety of taurolidine has also been confirmed in clinical studies with long-term intravenous administration of high doses (up to 20 grams daily). In the body, taurolidine is metabolized rapidly via the metabolites taurultam and methylol taurinamide, which also have a bactericidal action, to taurine, an endogenous aminosulphonic acid, carbon dioxide and water. Therefore, no toxic effects are known or expected in the event of accidental injection. Taurolidine has a relatively low acute and subacute toxicity. Intravenous injection of 5 grams

taurolidine into humans over 0.5–2 hours produce only burning sensation while instilling, numbness, and erythema at the injection sites. For treatment of peritonitis, taurolidine was administered by peritoneal lavage, intraperitoneal instillation or intravenous infusion, or by a combination thereof. The total daily dose ranged widely from 0.5 to 50 g. The total cumulative dose ranged from 0.5 to 721 g. In those patients who received intravenous taurolidine, the daily intravenous dose was usually 15 to 30 g but several patients received up to 40 g/day. Total daily doses of up to 40 g and total cumulative doses exceeding 300 g were safe and well tolerated. Taurolidine and taurultam are quickly metabolized to taurinamide, taurine, carbon dioxide and water. Taurolidine exists in equilibrium with taurultam and N-methylol-taurultam in aqueous solution.
The half-life of the terminal elimination phase of taurultam is about 1.5 hours, and of the taurinamide metabolite about 6 hours. 25% of the taurolidine dose applied is renally eliminated as taurinamide and/or taurine. Taurolidine is highly active against the common infecting pathogens associated with peritonitis and catheter sepsis, this activity extends across a wide-spectrum of aerobic and anaerobic bacteria and fungi (with no diminution of effect in the presence of biological fluids, e.g. blood, serum, pus).

* Tendinopathy-Mix targets the inhibition of pro-inflammatory genes IL-12, IL-23, IL17A, IL-17F, IL17AF and TNF-alpha. The products used are Ustekinumab, (Crohn's disease, ulcerative colitis, plaque psoriasis and psoriatic arthritis) Bimekizumab (plaque psoriasis), and Certolizumab pegol (Crohn's disease, rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis.)

* Tixagevimab-Cilgavimab is a combination of two human monoclonal antibodies, tixagevimab (AZD8895) and cilgavimab (AZD1061) targeted against the surface spike protein of SARS-CoV-2 used to prevent COVID-19. On 8 December 2021, the U.S. Food and Drug Administration (FDA) granted emergency use authorization of this combination to prevent COVID-19 (before exposure) in people with weakened immunity or who cannot be fully vaccinated due to a history of severe reaction to coronavirus vaccines. The FDA issued an emergency use authorization (EUA) for AstraZeneca's Evusheld (tixagevimab co-packaged with cilgavimab and administered together) for the pre-exposure prophylaxis (prevention) of COVID-19 in certain people aged 12 years of age and older weighing at least 40 kilograms (88 lb). The product is only authorized for those individuals who are not currently infected with the SARS-CoV-2 virus and who have not recently been exposed to an individual infected with SARS-CoV-2.

* Tolperisone is a piperidine derivative centrally acting skeletal muscle relaxant used for the treatment of increased muscle tone associated with neurological diseases. It has been used since the 1960s. Tolperisone is indicated for use in the treatment of pathologically increased tone of the skeletal muscle caused by neurological diseases (damage of the pyramidal tract, multiple sclerosis, myelopathy, encephalomyelitis) and of spastic paralysis and other encephalopathies manifested with muscular dystonia. Other possible uses include: Spondylosis. Spondylarthrosis. Cervical and lumbar syndromes. Arthrosis of the large joints. Obliterating atherosclerosis of the extremity vessels. Diabetic angiopathy. Thromboangiitis obliterans. Raynaud's syndrome. Its precise mechanism is not completely understood, though it blocks sodium and calcium

channels. It possesses a high affinity for nervous system tissue, reaching highest concentrations in brain stem, spinal cord and peripheral nerves. Based on existing clinical data, Tolperisone is not sedating and does not interact with alcohol. Manufacturers report that tolperisone should not be used in patients with myasthenia gravis. Only limited data are available regarding the safety in children, youths, during pregnancy and breastfeeding. It is not known whether tolperisone is excreted into mother's milk. Adverse effects occur in fewer than 1% of patients and include muscle weakness, headache, arterial hypotension, nausea, vomiting, dyspepsia, and dry mouth. All effects are reversible. Allergic reactions occur in fewer than 0.1% of patient and include skin rash, hives, Quincke's edema, and in some cases anaphylactic shock. Tolperisone does not have a significant potential for interactions with other pharmaceutical drugs. It cannot be excluded that combination with other centrally acting muscle relaxants, benzodiazepines or nonsteroidal anti-inflammatory drugs (NSAIDs) may make a dose reduction necessary in some patients. Tolperisone is absorbed nearly completely from the gut and reaches its peak blood plasma concentration after 1.5 hours. It is extensively metabolised in the liver and kidneys. The substance is excreted via the kidneys in two phases; the first with a half-life of two hours, and the second with a half-life of 12 hours.

* Urinary Bladder Mix-1.
-A-type Cranberry proanthocyanidins can prevent bacteria from sticking to the bladder wall and cause infection there instead.
-Asiatic Acid reverses the inflammatory processes in Interstitial Cystitis and restores the functional properties of the lower urinary tract. Asiatic acid normalizes the cystometric parameters corresponding to detrusor overactivity DO and prevents the accompanying oxidative stress and increased urinary secretion of neurotrophins but it does not influence these parameters in healthy subjects. Asiatic acid prevents the changes in a range of biomarkers indicating a dysfunction of the urinary bladder associated with smooth muscle contractions, urothelial barrier, or transportation and release of transmitters.
-Peppermint oil for the treatment of pain and discomfort in Interstitial Cystitis / Bladder Pain Syndrome.
-Resolvin D2, a metabolite of the omega-3 fatty acid, docosahexaenoic acid (DHA) relieves pain and improves bladder function by activating GPR18 gene which contributes to the resolution of inflammatory responses as well as inflammation-based through Inhibition of TRPV.
-Shionone, a triterpenoid component derived from the herbal medicine Aster tataricus, has anti-inflammatory properties. Shionone reduces bladder inflammation and decreases pyroptosis in the SV-HUC1 urothelial cell line, by inhibiting the NLRP3–GSDMD pathway.

* Urinary Bladder Mix-2.
-ZM241385 is a high affinity antagonist ligand selective for the adenosine A2A receptor. ZM241385 significantly alleviated bladder overactivity and hyperalgesia in CYP-treated animals by reducing the sensitivity of TRPV1 in DRG neurons.
-Intravesical treatment with Vessilen (a formulation of 2% adelmidrol + 0.1% sodium

hyaluronate) was able to ameliorate CYP-induced bladder inflammation and pain by inhibiting nuclear factor-κB pathway, and inflammatory mediator levels as well as reduce d mechanical allodynia and nerve growth factor levels
-Chlorogenic acid, a phenolic compound widely found in fruits and vegetables, significan tly attenuated inflammation, by inhibiting the MAPK/NF-κB pathway and decreasing proi nflammatory mediators IL6, IL1beta, and TNFalpha in the bladder.

* Urinary Bladder Mix-3.
-Ajulemic acid, a mixed CB1/CB2 receptor agonist, inhibited CGRP release ex vivo in ca psaicin- and ATP-stimulated whole rat bladders.
-JWH015, a selective CB2 agonist, significantly reduced leukocyte infiltration and proinfl ammatory cytokines in bladder interstitium of CD1 mice.
-GP1a selective CB2 agonist decreased severity of edema in acrolein-induced cystitis, i nhibited mechanical sensitivity, and decreased bladder urinary frequency that may be m ediated by inhibition of ERK1/2 pathway.
-JWH-133, a selective CB2 agonist completely inhibited mechanical hyperalgesia in CY P-induced mice Interstitial Cystitis, as well as ameliorated bladder inflammation and oxi dative stress.
-Beta-Caryophyllene (BCP), which is present in cannabis activates CB2 in mice with LP S-induced Interstitial Cystitis. BCP reduced bladder inflammation and improved bladder capillary perfusion.
-Palmitoylethanolamide, an endogenous lipid chemically related to the endocannabinoid anandamide, which, in addition to PARalpha, activates CB1 and CB2, was found to be a ble to attenuate pain behavior, voids, and bladder gross damage in a CYP-induced Inter stitial Cystitis mice model.

* Velusetrag, previously known as TD-5108, is an experimental drug candidate for the tr eatment of gastric neuromuscular disorders including gastroparesis, and lower gastroint estinal motility disorders including chronic idiopathic constipation and irritable bowel syn drome. It is a potent, selective, high efficacy 5-HT4 receptor serotonin agonist. Velusetr ag demonstrates less selectivity for other serotonin receptors, such as 5-HT2 and 5-HT 3, to earlier generation 5-HT agonists like cisapride and tegaserod. Velusetrag showed accelerated intestinal and colonic transit after single dosing and accelerated gastric emp tying after multiple dosing in healthy volunteer subjects. In addition, velusetrag showed accelerated gastric emptying in patients with diabetic or idiopathic gastroparesis. The pr oportion of patients who experienced at least a 20% improvement is gastric emptying ra nged from 20% to 52% for velusetrag dosed patients and 5% for placebo patients. On D ecember 6, 2016 the U.S. Food and Drug Administration (FDA) has granted Fast Track designation to velusetrag for the treatment of symptoms associated with diabetic and idi opathic Gastroparesis.

* Zetomipzomib (KZR-616), is a novel, first-in-class, selective immunoproteasome inhibi tor with broad therapeutic potential across >15 autoimmune disease models. KZR-616 o ffers a novel approach to harmonizing the immune system via selective immunoproteas ome inhibition. KZR-616 is under investigation in clinical trial NCT04033926 (A Phase 2 Study of KZR-616 to Evaluate Safety and Efficacy in Patients With Active Polymyositis o

r Dermatomyositis.) Playing a critical role in the body's immune system, the immunopro teasome is abundantly expressed in immune cells and acts as a master regulator of mul tiple cellular functions. By selectively inhibiting the immunoproteasome, KZR-616 has th e potential to affect multiple drivers of immune-mediated diseases such as Lupus nephri tis, systemic Lupus erythematosus, polymyositis and dermatomyositis -both of these are idiopathic inflammatory myopathies. The safety and tolerability of KZR-616 is favorable and consistent with needs for a long-term therapy.

1.3.1.48 RT-MB-60

https://archive.org/details/Resonant_Therapy-Molecular_Biology_60

5-Nitroindirubin-3′-oxime; A-438079; Aceclidine; ANA-12l ATX-LPA-LPARs Inhibitors; BMP6 Factor; BMP9-Leptin Factors; Bocidelpar; Brimochol; C004019; CD2019; Coenzyme CoQ10; D-Pantothenic Acid; Duchenne Mix; E-64; Forskolin-RepSox; FTX-6058; Givinostat; Ifetroban; Losmapimod; MBL Factor; Morin; Myriocin; NEP1-40; Pamrevlumab; PRM-151; Rimeporide; THX-B; UNR844; Vamorolone

* 5-Nitroindirubin-3′-oxime. A treatment with this small molecule leads to inhibition of cyclin D1 and thus inhibition of proliferation. Skin cancers are the most common malignancies in the world. Among the most frequent skin cancer entities, squamous cell carcinoma (SCC) ranks second (~20%) after basal cell carcinoma (~77%). In early stages, a complete surgical removal of the affected tissue is carried out as standard therapy. Knowledge of characteristic molecular alterations in certain cancer entities, such as SCC, can help identify tumor-specific substances for targeted therapies. Most frequently, altered genes in SCC include TP53, NOTCH, EGFR, and CCND1. For example, the gene CCND1, which codes for cyclin D1 protein, is upregulated in nearly half of SCC cases and promotes proliferation of affected cells. As a component of Danggui Longhui Wan, a traditional Chinese medicine, indirubins are used to treat chronic diseases and have been shown to inhibit inflammatory reactions. Indirubins are pharmacologically relevant small molecules with proapoptotic and antiproliferative activity. (https://doi.org/10.3390/cancers13081770)

* A-438079 is a selective P2X7 purinoceptor antagonist in both human and rat with minimal activity at 75 different G-protein-coupled receptors, enzymes, transporters, and ion channels tested. A-438079 molecule, one of the most potent and selective antagonists that competitively blocks P2X7 receptor in vitro activation and produces anti-nociceptive effects in in vivo settings. In addition to nociception, A438079 has already been successfully used in in vivo models of hyperalgesia, epilepsy, Parkinson’s disease, salivary gland exocrinopathy, and Charcot-Marie-Tooth 1A disease.

* Aceclidine is a small molecule acetylcholinesterase receptor agonist that causes pupil contraction, or miosis, creating a pinhole effect that improves near vision. Studies have shown that aceclidine’s mechanism of action is differentiated from competing

therapeutic options due to its ability to create a pinhole pupil effect while avoiding myopic shift. It is crucial to minimize myopic shift as it can significantly impair distance vision for a majority of presbyopes. Aceclidine's unique MOA, in which miosis is decoupled from myopic shift, is expected to allow it to target the broadest patient population. In the phase 2 trial, the near vision improvement was due to aceclidine's ability to maintain a pinhole pupil sweet spot of 1.5 mm to 2 mm for 7 hours. There was no loss and a slight trend toward net gain in best corrected distance vision. In addition, aceclidine was well tolerated with most common side effect being mild discomfort on instillation and no serious adverse events. Aceclidine has been marketed in Europe but has not been used clinically in the United States. It is used in the treatment of open-angle glaucoma and is a parasympathomimetic agent.

* ANA-12 is a selective, small-molecule non-competitive antagonist of TrkB, the main receptor of brain-derived neurotrophic factor (BDNF). The compound crosses the blood-brain-barrier and exerts central TrkB blockade. It blocks the neurotrophic actions of BDNF without compromising neuron survival. ANA-12 produces rapid antidepressant- and anxiolytic-like effects in animal models, the former of which have been elucidated to be mediated by blockade of BDNF signaling in the nucleus accumbens. It has also been found to alleviate methamphetamine-induced depression-like behavior (including anhedonia), behavioral sensitization, and nucleus accumbens neuroplasticity changes with subchronic (14-day) administration in mice. ANA-12 blocks the cognitive-enhancing effects of environmental enrichment and calorie restriction in rodents, which are mediated by BDNF signaling through TrkB in the hippocampus. It also blocks hippocampal neurogenesis induced by physical exercise in rodents, and may block the cognitive-enhancing effects of exercise as well.

* ATX-LPA-LPARs Inhibitors. The ATX/LPA/LPARs axis could be part of an unexplored pro-fibrotic program in skeletal muscle pathologies causing muscular fibrosis such as DMD and Limb-girdle MD. Studies that modulate the function or the presence/absence of LPA receptors yielded the most promising results that suggest a role for the ATX/LPA/LPARs axis in fibrosis pathogenesis. There is increasing data suggesting that pharmacological blockage or genetic deletion of LPA receptors could prevent the development of induced fibrosis in different organs. The primary LPA receptors that appeared to be involved in fibrosis are LPA1 and LPA3. An increasing amount of evidence places LPA as a potent modulator of inflammation in different tissues such as lung, liver, cancer-related-organs, skeletal muscle such as in chronic injury of the rotator cuff muscles and, the heart in myocardial infarction. The recording plays the sound frequencies of PF-8380 (ATX inhibitor), Ki-16425 (LPA1 and LPA3 inhibitor), VPC-12259 (LPA1and LPA3 inhibitor) and, AM-095 (LPA1 inhibitor.)
-PF-8380 is a potent orally bioavailable inhibitor of autotaxin (ATX), the enzyme that synthesize lysophosphatidic acid (LPA) from lysophosphatidyl choline, and is an emerging target for treatment of inflammatory conditions, including cancer, arthritis and multiple sclerosis. PF-8380 blocks inflammation-induced LPA synthesis. PF-8380 works both in vitro and in vivo through direct inhibition of autotaxin. In human whole blood PF-8380 inhibited autotaxin with an IC50 of 101 nM.
-Ki-16425 is an antagonist of LPA1 and LPA3 receptors with moderate activity against

LPA2. Ki-16425 inhibition of LPA receptors 1 and 3 prevents the induction of CCN2 by TGF-β. Ki16425 also downregulates the SMAD 2/3 proteins.
-VPC-12249 reduces collagen deposition and prevents the induction of pro-fibrotic cytokines such as CCN2 and TGF-β in the lung.
-AM-095, an LPA1 inhibitor, causes motor skills improvement evaluated by grip strength, rotarod, and runtime.
(https://doi.org/10.1007/s12079-021-00610-w)

* BMP6 Factor deficiency in diabetics causes delay in bone fracture consolidation. The categories of bone fracture are the following: Closed or open fractures; complete fractures; displaced fractures; partial fractures; stress fractures. Some extra terms must also be added to describe partial, complete, open, and closed fractures. These terms include avulsion; comminuted; compression; impacted; oblique; spiral; transverse. Most often, bone fractures happen because the bone runs into a stronger force. Repetitive forces, such as running, can also fracture a bone (stress fractures). Another reason for fractures is osteoporosis, which weakens bones as you age. Internal fixation for nonunions should provide sufficient stability for fracture healing without excessive rigidity. The choice of internal fixation depends on the type of nonunion, the condition of the soft tissues and bone, the size and position of the bone fragments, and the size of the bony defect.

* BMP9-Leptin Factors when combined might improve fracture healing. The categories of bone fracture are the following: Closed or open fractures; complete fractures; displaced fractures; partial fractures; stress fractures. Some extra terms must also be added to describe partial, complete, open, and closed fractures. These terms include avulsion; comminuted; compression; impacted; oblique; spiral; transverse. Most often, bone fractures happen because the bone runs into a stronger force. Repetitive forces, such as running, can also fracture a bone (stress fractures). Another reason for fractures is osteoporosis, which weakens bones as you age. Internal fixation for nonunions should provide sufficient stability for fracture healing without excessive rigidity. The choice of internal fixation depends on the type of nonunion, the condition of the soft tissues and bone, the size and position of the bone fragments, and the size of the bony defect.

* Bocidelpar sulfate (ASP0367) is an orally administered small molecule that potently and selectively modulates peroxisome proliferator-activated receptor δ (PPARδ) to address mitochondrial dysfunction occurring in diseases including primary mitochondrial myopathy and Duchenne muscular dystrophy. The PPAR–δ pathway regulates mitochondria by turning on different genes in the cell. When the pathway is on, the mitochondria use fatty acids more often and more mitochondria are made. Using more fatty acids for energy results in increased energy production. Mitochondria are specialized structures within cells that supply chemical energy to power the activities of the cells, such as repairing muscle cells. Individuals with Duchenne lack efficient mitochondria in their cells. It is thought that by increasing or enhancing the mitochondria in muscle cells, the cellular functions of the muscle could be improved.

* Brimochol or Carbachol-Brimonidine tartrate is a miotic-based eye drop for presbyopia. Miotic agents like carbachol constrict the pupil to induce what’s called the “pinhole effec

t.” Similar to reducing the aperture of a camera, shrinking the pupil brings near images i nto clearer focus. Brimonidine dampens headache or brow ache, myopic shift, eye redn ess, or a loss of distance visual acuity reported by patients who take single-agent miotic s. Brimonidine inhibits the contraction of the ciliary muscle, which means patients end u p with a drug that gives them this meiosis, this pinhole effect, without the unwanted side effects. The effect could last at least eight hours. Carbachol is a parasympathomimetic t hat mimics the effect of acetylcholine on both the muscarinic and nicotinic receptors. Thi s drug is administered ocularly to induce miosis to reduce intraocular pressure in the tre atment of glaucoma. Carbachol is also used to stimulate micturition by contraction of det rusor muscle. This drug may cause hypotension, bradycardia, nausea, vomiting, bronch ospasm, and abdominal cramps. Carbachol is an ammonium salt and a carbamate ester It has a role as a nicotinic acetylcholine receptor agonist, a muscarinic agonist, a non-n arcotic analgesic, a cardiotonic drug and a miotic. Cholinergic, parasympathomimetic, u sed chiefly in large animals, especially for colic in the horse. (EPA, 1998). Brimonidine t artrate is the tartrate salt form of brimonidine, an imidazole derivative and a selective alp ha-2 adrenergic receptor agonist. Upon ocular administration, brimonidine tartrate acts on the blood vessels causing them to constrict which leads to a decrease in the producti on of aqueous humor. Brimonidine tartrate also enhances the outflow of aqueous humor. This drug is used in the treatment of glaucoma to reduce intraocular pressure. A quinox aline derivative and adrenergic alhpa-2 receptor agonist that is used to manage intraocu lar pressure associated with open-angle glaucoma and ocular hypertension.

* C004019 is a small molecule designed on the basis of Proteolysis Targeting Chimera (PROTAC) to selectively enhance ubiquitination and proteolysis of tau proteins. C00401 9 robustly promotes tau clearance in multiple tau-overexpressing cell models via ubiquiti nation-proteasome pathway. Furthermore, both intracerebral and subcutaneous adminis tration of C004019 could also remarkably reduce tau level in wild-type, human tau (hTa u) transgenic and 3xTg-AD mouse models with simultaneous amelioration of synaptic a nd cognitive functions.Increasing evidence suggests that intracellular accumulation of ta u plays a pivotal role in neurodegeneration and memory deficits in AD and the related n eurodegenerative disorders, collectively termed tauopathies. The chimera is composed of three parts including a tau binder, a linker and an E3 ligase recruiter or Vhl binder, in which the two functional parts respectively binds to tau proteins and E3 ligase to reach a selective and efficient ubiquitination and the subsequent proteasome-mediated proteol ysis of tau. In vitro and in vivo testing C004019 shows it efficiently induces clearance of tau proteins in both physiological and pathological conditions. Remarkably, even single-dose or infrequently (once per 6 days) subcutaneous administration of this molecule ach ieved a sustained tau reduction in the brain of hTau and 3xTg-AD transgenic mouse mo dels. Lowering tau can alleviate Aβ-induced neurotoxicity, and knockdown of tau does n ot elicit obvious abnormalities in mice. (https://www.thno.org/v11p5279.htm)

* CD2019 overcomes inhibition of axonal outgrowth via phosphoinositide 3-kinase signa lling in the injured adult spinal cord. After spinal cord injury in the adult mammal, axons do not normally regrow and this commonly leads to paralysis. Retinoic acid (RA) can sti mulate neurite outgrowth in vitro of both the embryonic central and peripheral nervous s ystem, via activation of the retinoic acid receptor (RAR) beta2. Spinal cord injuries (SCI

s) often result in permanent damage in the adult due to the very limited capacity of axon al regeneration. Intrinsic neuronal programs and the formation of a glial scar are the mai n obstacles. Activation of RARβ in the neuron inactivates phosphatase and tensin homol og and induces its transfer into the astrocytes in small vesicles, where it prevents scar f ormation.

* Coenzyme CoQ10 (ubiquinone) is present in all respiring eukaryotic cells, primarily in the mitochondria. It is a component of the electron transport chain and participates in ae robic cellular respiration, which generates energy in the form of ATP. Ninety-five percent of the human body's energy is generated this way. Organs with the highest energy requi rements—such as the heart, liver, and kidney—have the highest CoQ10 concentrations. n a 2017 meta-analysis of people with heart failure 30–100 mg/d of CoQ10 resulted in 31% lower mortality. Exercise capacity was also increased. The Canadian Headache Society guideline for migraine prophylaxis recommends, based on low-quality evidence, that CoQ10 be offered as a choice for prophylaxis. A 2018 meta-analysis concluded that there was preliminary evidence for oral CoQ10 reducing statin-associated muscle symptoms, including muscle pain, muscle weakness, muscle cramps and muscle tiredness. CoQ10 may reduce the effectiveness of chemo and radiation therapy, so most oncologists would recommend avoiding it during cancer treatment. A 1995 review study found that there is no clinical benefit to the use of CoQ10 in the treatment of periodontal disease. When applied topically in skincare products it demonstrates some ability to reduce oxidative stress in the skin, delay signs of intrinsic skin aging, reverse signs of extrinsic skin aging, assist in fading dyspigmentation, increase stability of certain sunscreen actives, increase the SPF of sunscreens, and afford some infrared protection to sunscreens. Much of the research on the skin benefits of ubiquinone show that it works synergistically with other topical antioxidants to improve the skin and cosmetic formulations. Coenzyme Q10 has potential to inhibit the effects of theophylline as well as the anticoagulant warfarin; coenzyme Q10 may interfere with warfarin's actions by interacting with cytochrome p450 enzymes thereby reducing the INR, a measure of blood clotting. The structure of coenzyme Q10 is very similar to that of vitamin K, which competes with and counteracts warfarin's anticoagulation effects. Coenzyme Q10 should be avoided in patients currently taking warfarin due to the increased risk of clotting.

* D-Pantothenic Acid (pantothenate, vitamin B5) is a water-soluble vitamin ubiquitously found in plants and animal tissues with antioxidant property. Vitamin B5 is a component of coenzyme A (CoA) and a part of the vitamin B2 complex. Vitamin B5 is a growth factor and is essential for various metabolic functions, including the metabolism of carbohydrates, proteins, and fatty acids. This vitamin is also involved in the synthesis of cholesterol, lipids, neurotransmitters, steroid hormones, and hemoglobin. Only the dextrorotatory (D) isomer of pantothenic acid possesses biological activity. while the levorotatory (L) form may antagonize the effects of the dextrorotatory isomer.

* Duchenne Mix for Duchenne muscular dystrophy (DMD) is,
-Ubiquinone (co-enzyme Q10), a key component of an energy pathway in the mitochondria, called the electron transport chain.

-Edasalonexent, a small molecule that inhibits a protein called NF-kappa B in the NF-kappa B pathway. This pathway is activated in people with Duchenne muscular dystrophy (DMD), resulting in muscle fiber breakdown and the inability to repair muscle injuries.
-Ezutromid upregulates the production of utrophin to substitute for the deficiency of dystrophin in people with DMD. Utrophin upregulation is an actively researched therapeutic approach for the treatment of DMD. Utrophin is similar to dystrophin, but is produced only during embryonic development. It is hypothesized that increased utrophin during adulthood can compensate for the lack of dystrophin in DMD patients.
-MNK-1411 is the synthetic equivalent of the adrenocorticotropic hormone. It is a synthetic melanocortin agonist — a substance that acts like another substance, stimulating an action — that acts on melanocortin receptors. It delays the progression of DMD by modulating immune system activity and reducing muscle inflammation.

* E-64 is a small molecule inhibitor exhibiting the activity against African swine fever virus protease pS273R. The pS273R protein of the African swine fever virus (ASFV) is a specific SUMO-1-like cysteine protease that plays an important role in its replication process. To inhibit virus replication and improve treatment options the 14th carbon atom of the cysteinase inhibitor E-64 could form one Csingle bondS covalent bond with the Cys 232 amino acid of the pS273R protease and seven additional hydrogen bonds to maintain a stable binding state. E-64 could effectively inhibit the enzyme activity center of the pS273R protease by preventing pS273R protease from lysing pp62, while promoting the upregulation of immune-related cytokines at the transcription level. Moreover, cell viability results revealed that 4 mmol/L E-64 was not cytotoxic. This is a novel strategy to potentially prevent ASFV infection in pigs by blocking the activity of pS273R protease with a small-molecule inhibitor. African swine fever (ASF) is a viral disease in swine that results in high mortality in domestic pigs and causes considerable economic losses. The disease only affects humans exceptionally. Currently, there is no effective vaccine or drugs available for treatment. E64 is an epoxy monocarboxylic acid, a dicarboxylic acid monoamide, a member of guanidines and a L-leucine derivative. It has a role as a protease inhibitor, an antimalarial and an antiparasitic agent. (https://doi.org/10.1016/j.bmc.2021.116055)

* Forskolin-RepSox is a combination of the root extract forskolin and the small molecule RepSox — that can efficiently create large numbers of muscle stem cells. This chemical cocktail enabled muscle stem cells in elderly mice to overcome their adverse environment and launch a robust repair response. The approach would fix the genetic defect that causes Duchenne or other genetic muscular dystrophies. Forskolin is a potent activator of the adenylate cyclase system and the biosynthesis of cyclic AMP. From the plant Coleus forskohlii. Has antihypertensive, positive inotropic, platelet aggregation inhibitory, and smooth muscle relaxant activities; also lowers intraocular pressure and promotes release of hormones from the pituitary gland. RepSox is a potent and selective inhibitor of the TGF-β type 1 receptor (TGFβRI)/ALK5 that exhibits cell permeability and specifically inhibits ALK5 autophosphorylation with IC50 of 4 nM. R epSox has also been shown to contribute to the reprogramming of mouse embryonic fib roblasts to iPSCs, in addition to the induction of human fibroblasts into neuronal cells for

research on Alzheimer's disease. It has also been used as a basal media component for culturing human pluripotent stem cells.

* FTX-6058 is an investigational, potent, and selective small molecule inhibitor of Embry onic Ectoderm Development EED designed to increase the expression of fetal hemoglo bin (HbF) with the potential to treat hemoglobinopathies, such as sickle cell disease and beta-thalassemia. Results from the MAD portion of the trial demonstrated proof of biolog y as evidenced by a dose proportional induction in HBG mRNA and accompanying incre ases in HbF-containing reticulocytes (F-reticulocytes). At 10mg, the highest dose studie d to date, the mean changes were 4.5-fold and 4.2-fold, respectively. The increases in F-reticulocytes indicate that the HBG mRNA increases observed with FTX-6058 treatme nt are translating to HbF protein production. SCD is caused by mutations in the gene th e encodes hemoglobin — the protein that carries oxygen in red blood cells. Current therapies are limited in efficacy, and new experimental gene therapies are only available to certain patients. FTX-6058 is designed to boost the production of fetal hemoglobin, improve oxygen transport, and alleviate disease symptoms. Higher doses of FTX-6058 effectively raised hemoglobin messenger RNA (mRNA) levels above those found at lower doses in healthy volunteers participating in a Phase 1 trial.

* Givinostat is a molecule being developed to treat Duchenne and Becker muscular dystrophies. It inhibits enzymes called histone deacetylases that turn off gene expression and can reduce a muscle's ability to regenerate. Givinostat is currently being evaluated in a Phase 3 trial in Duchenne patients and a Phase 2 trial in Becker. Givinostat inhibits class I and class II histone deacetylases (HDACs) and several pro-inflammatory cytokines. This reduces expression of tumour necrosis factor (TNF), interleukin 1α and β, and interleukin 6. It also has activity against cells expressing JAK2 (V617F), a mutated form of the janus kinase 2 (JAK2) enzyme that is implicated in the p athophysiology of many myeloproliferative diseases, including polycythaemia vera. In p atients with polycythaemia, the reduction of mutant JAK2 concentrations by givinostat is believed to slow down the abnormal growth of erythrocytes and ameliorate the symptom s of the disease. Givinostat or gavinostat (originally ITF2357) is a histone deacetylase in hibitor with potential anti-inflammatory, anti-angiogenic, and antineoplastic activities. Giv inostat has been granted orphan drug designation in the European Union for the treatm ent of systemic juvenile idiopathic arthritis, polycythaemia vera. and Duchenne muscular dystrophy. The U.S. Food and Drug Administration has granted givinostat orphan drug, f ast track, and rare pediatric disease designations for the treatment of DMD and BMD. A preclinical study produced early results suggesting the molecule might help with diastoli c dysfunction.

* Ifetroban is a potent and selective thromboxane receptor antagonist. It has been studi ed in animal models for the treatment of myocardial ischemia, hypertension, stroke, thro mbosis, cardiomyopathy, and for its effects on platelets. Ifetroban is being studied as a p otential anti-fibrotic medication in several diseases but is not approved for and has neve r been studied in DMD patients. Studies in animal models of DMD showed oral ifetroban can prevent the scarring in the heart associated with Duchenne and improve survival co mpared to placebo. Cardiac function is a concern in Duchenne, as the heart is a muscle

and is affected by the lack of dystrophin.

* Losmapimod is a potential treatment being for people with facioscapulohumeral muscu lar dystrophy (FSHD). FSHD is characterized by progressive weakness and wasting of muscles in the face, shoulders, and upper arms. Mutations in a specific region toward th e end of chromosome 4, called the D4Z4 region, are known to contribute to a form of FS HD called FSHD1. These mutations lead to hypomethylation of a gene in the D4Z4 regi on called DUX4, the production of which is thought to adversely influence the activity of other genes in muscle cells, resulting in FSHD symptoms. Mutations in the DUX4 gene account for more than 90% of all FSHD cases. They cause excessive gene expression or activity, which leads to muscle degeneration and fat infiltration. Mitogen-activated prot ein kinases (MAPKs) are proteins that are activated as a cellular response to external st ress, and have been shown to regulate the activity of the DUX4 gene. By inhibiting the a ctivity of MAPKs using small molecules such as MAPK inhibitors, the overactive DUX4 g ene can be controlled.
Losmapimod is a selective MAPK inhibitor that has been seen in early studies to reduce DUX4 gene activity in FSHD patient-derived myotubes (fused muscle cells). Losmapimo d does not affect the differentiation of myotubes or alter the production of other proteins in muscle cells. It is thought to inhibit the DUX4 gene and downstream pathways in a co ncentration-dependent manner in both FSHD1 and FSHD2.

* MBL Factor or mannose-binding lectin, also called mannan-binding lectin or mannan-b inding protein (MBP), is a lectin that is instrumental in innate immunity as an opsonin an d via the lectin pathway. MBL belongs to the class of collectins in the C-type lectin super family, whose function appears to be pattern recognition in the first line of defense in the pre-immune host. MBL recognizes carbohydrate patterns found on the surface of a larg e number of pathogenic micro-organisms, including bacteria, viruses, protozoa and fung i. Binding of MBL to a micro-organism results in activation of the lectin pathway of the co mplement system. Another important function of MBL is that this molecule binds senesc ent and apoptotic cells and enhances engulfment of whole, intact apoptotic cells, as well as cell debris by phagocytes. The complement system can be activated through three p athways: the classical pathway, the alternative pathway, and the lectin pathway. One wa y the most-recently discovered lectin pathway is activated is through mannose-binding l ectin protein. MBL binds to carbohydrates (to be specific, D-mannose and L-fucose resi dues) found on the surfaces of many pathogens. For example, MBL has been shown to bind to: yeasts such as Candida albicans; viruses such as HIV and influenza A; many b acteria, including Salmonella and Streptococci; parasites like Leishmania; SARS-CoV-2 (Covid-19).

* Morin, is a natural compound with pro-osteogenic effects. Morin has an important pro-osteogenic effect in vivo that might facilitate osteoblast development and the production of osteoblast-related marker genes and in vitro protein markers for osteoblasts. In terms of molecular biology, morin contributes to osteoblast development and Wnt pathway sti mulation through the activation and translocation of β-catenin nuclei. In short, morin can be a good bone substitute that can provide benefits for regenerating bone defect. The c ategories of bone fracture are the following: Closed or open fractures; complete fracture

s; displaced fractures; partial fractures; stress fractures. Some extra terms must also be added to describe partial, complete, open, and closed fractures. These terms include av ulsion; comminuted; compression; impacted; oblique; spiral; transverse. Most often, bon e fractures happen because the bone runs into a stronger force. Repetitive forces, such as running, can also fracture a bone (stress fractures). Another reason for fractures is o steoporosis, which weakens bones as you age. Internal fixation for nonunions should pr ovide sufficient stability for fracture healing without excessive rigidity. The choice of inter nal fixation depends on the type of nonunion, the condition of the soft tissues and bone, the size and position of the bone fragments, and the size of the bony defect.

* Myriocin, also known as antibiotic ISP-1 and thermozymocidin, is a non-proteinogenic amino acid derived from certain thermophilic fungi. Myriocin is a very potent inhibitor of serine palmitoyltransferase, the first step in sphingosine biosynthesis. Due to this proper ty, it is used in biochemical research as a tool for depleting cells of sphingolipids. Highe r-than-normal sphingolipids levels are implicated in disorders that include Alzheimer's di sease, cardiovascular disease, diabetes, and obesity, in which sphingolipids are reporte d to accumulate in skeletal muscle and contribute to insulin resistance. Sphingolipid pro duction is a potential therapy target for Duchenne muscular dystrophy DMD and combin ing blockers of sphingolipid production with glucocorticoids may be of more benefit than glucocorticoids alone.

* NEP1-40 is a Nogo-66 receptor antagonist peptide. Administration of NEP1-40 attenuated the reduction of MBP, and upregulated GAP-43 and MAP-2 expression. MBP, a major constituent of CNS myelin, has been used as a marker of post-ischemic white matter injury and repair. GAP-43 and MAP-2 are molecular indicators of axonal plasticity in the CNS. NEP1-40 ameliorated myelin damage and promoted regeneration by upregulating the expression of GAP-43 and MAP-2 related to neuronal and axonal plasticity, which may aid with the identification of a novel molecular mechanism of restriction in CNS regeneration mediated by Nogo-A after ischemia in rats. Administration of NEP1-40 attenuates neurological deficits following ischemic stroke. Nogo-A is a potent inhibitor of neurite growth involved in regenerative failure, and neutralization of Nogo-A may allow for the generation of nerve growth and enhance structural reorganization in regions surrounding the lesions. However, the underlying molecular mechanism remains to be elucidated. NEP1-40 overexpression enhanced the ability of NSCs differentiation into neurons and promoted axon regeneration by inhibiting the Nogo-A/NgR1 signaling pathway.

* Pamrevlumab (FG-3019) is a fully human antibody designed to bind to and block the activity of connective tissue growth factor (CTGF), a pro-inflammatory protein that promotes wound healing and fibrosis (scarring), and is found at abnormally high levels in the muscles of DMD patients. Progressive, abnormal muscle fibrosis is a hallmark of muscular dystrophies, contributing to muscle weakness and injury, including to cardiac muscle — a major complication of DMD. By blocking CTGF, the therapy, administered directly into the bloodstream, is expected to suppress muscle fibrosis, thereby preventing the decline in patients' motor, lung, and heart function, and possibly improving their status. The U.S. Food and Drug Administration has granted fast track

designation to pamrevlumab, an investigational treatment for Duchenne muscular dystrophy (DMD). FG-3019 is already in clinical trials for other diseases involving fibrosis, including pulmonary fibrosis and kidney fibrosis.

* PRM-151 is an intravenous formulation of recombinant human pentraxin-2 in development for idiopathic pulmonary fibrosis (IPF) and myelofibrosis. Pentraxin-2, also referred to as serum amyloid P, has been found to inhibit apoptosis, airway inflammation, pulmonary fibrocyte accumulation, and collagen deposition driven by transforming growth factor beta-1. Pentraxin-2 also promotes macrophages associated with increased expression of interleukin-10 and interferon gamma-induced protein-10, which both possess anti-fibrotic properties.

* Rimeporide is an investigational treatment for Duchenne MD. The muscle cells of Duchenne patients have an overload of calcium, which is thought to be caused by dysfunctional NHE-1. Over time, high calcium concentrations contribute to the muscle damage that is seen in patients. Rimeporide inhibits NHE-1, thereby correcting calcium levels in the cell. A Phase 1b trial has been completed. Rimeporide was designed as a treatment for chronic heart failure. It was tested in seven Phase I studies clinical trials in patients with congestive heart failure and some degree of renal insufficiency. Subsequently, the drug was licensed to EspeRare, a Swiss nonprofit organisation that aims at repositioning drugs for rare diseases. As of May 2015, the substance has demonstrated efficacy in several animal models of Duchenne muscular dystrophy. It has also been recently tested in young boys with Duchenne muscular Dystrophy aged 6 to 11 years.

* THX-B is a small-molecule specific antagonist of p75(NTR). THX-B, has shown to restore normal bladder weight and voiding function in type 1 diabetic mice. Most importantly, the anti-inflammatory potency of p75NTR antagonism was demonstrated in the brain of mice with severe sepsis, supporting a molecular interplay between the p75NTR and TLR4 signaling axes in innerved tissues. Data suggests that p75NTR and TLR4 signaling axes form together cell-specific interplays in the bladder, p75NTR dysregulates bladder morphology and voiding. dysfunction, especially by interplaying with TLR4 signaling in infection.
(https://escholarship.mcgill.ca/concern/theses/wd376260w)

* UNR844 is a presbyopia drop from Novartis which uses lipoic acid choline ester 1.5% (an antioxidant) to break apart the disulfide bonds that form between proteins within the lens, and by doing so, increasing the lens flexibility and elasticity. What is unique about this drop is that it may have the potential to restore natural accommodation instead of just creating a pinhole effect like the miotic drops. In phase 1 and 2 studies, UNR844 demonstrated good initial results. All patients showed a substantial improvement in near acuity by day 15. At the end of three months, 82% of patients had 20/40 or better near vision and 36% had 20/25 or better. Therefore, the drop will likely be used twice a day for 90 days to achieve maximal effects. After discontinuing the drop after 90 days, the drug’s effects lasted up to 7 months without further dosing.

* Vamorolone is a dissociative steroid. It works in a similar way to other corticosteroids by activating certain pathways within the cell and inhibiting others. For example, it inhibits the NF-kB pathway, which is linked to inflammation. It also binds to and helps stabilize the membranes around cells without causing transactivation. Transactivation is the increase of gene expression that glucocorticoid response elements (GRES) cause. It results in many of the side effects of corticosteroid treatment. The benefit of Vamorolone, however, is that it is thought to have significantly fewer side effects than existing steroids, which can be life changing in themselves. Prednisone side effects include diabetes, high blood pressure, osteoporosis, short stature and weight gain. Vamorolone also may help preserve heart function in DMD patients through the inhibition of mineralocorticoid receptors. It also binds to and helps stabilize the membranes around cells without causing transactivation. Vamorolone also may help preserve heart function in Duchenne patients. Due to safety concerns related to the interaction between the muscle clock and drug-activated molecules, they should be administered at the start of the light period (approximately 7 am) to promote muscle function. Increased endurance and improved muscle mass and muscle force were lost when dosing occurred in the dark period.

1.3.1.49 RT-MB-61

https://archive.org/details/Resonant_Therapy-Molecular_Biology_61

5-HMF; 8DSS Peptide; Ageing Skin Care; Caulophyllum Robustum Maxim; Cellulite Mix; Chemical Peel; Foot Care Mix; GH1504; Hai Feng Teng; He Shou Wu; Hu Gu; Huo Ma Ren; Hydrogen peroxide-Urea; Jin Yin Hua-Dan Zhu Ye; Luo Han Guo; Mitoxantrone; Narciclasine; Niu Bang Zi ; Nutritional Supplement.; Rehydration Therapy; Skin Lesions-Growths; SR12343; Suan Zao Ren; TLK16998; Zibotentan

* 5-HMF or 5-hydroxymethylfurfural from Rehmanniae Radix Praeparata (shu di huang) has positive pharmacological effects on cardiovascular and hematological disorders. For example, 5-HMF can increase hemoglobin’s oxygen affinity to support cardiac function during severe hypoxia and ameliorates blood deficiency syndrome (BDS). It also has sound biological effects, such as antioxidant activity and strengthening the resistance of sickle red blood cells to injury caused by hypoxia. is a natural medicine used in traditional Chinese medicine (TCM) since ancient times for the treatment of blood disorders.
Shu Di Huang Property: Sweet, slightly warm; kidney and liver meridians entered. Actions: Tonify blood, nourish yin of liver and kidney, supplement essence. Indications: A. Blood deficiency syndrome, especially for both essence (yin) and blood insufficiency. B. Deficiency of liver-kidney yin. Being with action of nourishing yin of liver and kidney, especially skilled in nourishing kidney yin, it is known as the key herb for treating syndrome of kidney yin deficiency. For soreness and limpness in lumbar and knees, tinnitus, deafness, red tongue with little coating due to liver and kidney yin deficiency, or bone-steaming, tidal fever, hot sensation in palms due to effulgent fire caused by yin deficiency. C. Syndrome of both essence and blood deficiency. It can nourish essence ancl blood. For sore

ness and limpness of lumbar and knees, early white of beard and hair, hypoevolutism of infants and children due to deficiency of both essence and bloode coating due to liver a nd kidney yin deficiency, or bone-steaming, tidal fever, hot sensation in palms due to eff ulgent fire caused by yin deficiency. It should be used with cautions for spleen and stom ach deficiency, loose stool due to fullness in abdomen and qi stagnation with excessive phlegm because it is greasy and will produce indigestion. RR is steamed to get Rehman niae Radix Praeparata, which has a tonic effect on blood; the content of 5-hydroxymeth ylfurfural (5-HMF) increases more than four times after steaming. (https://doi.org/10.33 89/fphar.2021.811331) (https://www.americandragon.com/Individualherbsupdate/Shu DiHuang.html)

* 8DSS Peptide can promote remineralization of initial enamel carious lesions induced i n vitro by pH cycling. Dentin phosphoprotein, which is secreted by odontoblasts and lies in the dentin mineralization front, is the most abundant noncollagenous protein existing i n the dentin extracellular matrix and has been employed as a nucleation template in for ming hydroxyapatite to initiate dentin mineralization. There is an aspartate- and serine-ri ch region within the dentin phosphoprotein sequence, consisting primarily of a large nu mber of repeats of the sequence aspartate-serine-serine (DSS). This region is known to be highly phosphorylated and highly flexible and is thought to bind with high affinity to c alcium phosphate compounds. Moreover, these small peptides can act as initiator and modulator in generating hydroxyapatite minerals by providing an optimal alignment of ca lcium ion binding sites. Of these multi-DSS peptides, the one containing eight DSS repe ats (8DSS peptide) is the most active in the mediation of biologically directed mineral de position, and it possesses the ability to promote mineral deposition. 8DSS peptide in a r at model of enamel caries in vivo prominently induced remineralization compared with c ontrol samples treated with distilled deionized water. 8DSS peptide enables the regressi on of enamel demineralization and boosts enamel remineralization in a rat model.
(https://doi.org/10.1177/2280800019827798)

* Ageing Skin Care
- Pal-KT - Palmitoyl-lysine-threonine (pal-KT) is one of the shortest peptides. When test ed with human skin equivalents, it was found to enhance differentiation of the epidermis, basement membrane zone,and dermal fibroblasts. Within dermal fibroblasts, pal-KT incr eased collagen I, collagen IV,and fibronectin.
- Retinyl propionate, a patented and less irritating form of retinol (a form of vitamin A) an d propionic acid (a liquid fatty acid). It has multiple effects on the skin. It's been studied f or effects on collagen synthesis and barrier protection.
- Niacinamide, a form of Vitamin B3, which improves moisture retention, fine lines and h yperpigmentation.
- Hexamidine, a chemical also used in diaper lining, helps lock in moisture; studies sho w it also helps to improve the pathways for lipids (fats) to travel through the skin layers, t hereby improving thickness.

* Caulophyllum Robustum Maxim (CRM). CRM is an extremely effective Chinese folk m edicine. C. robustum can dispel wind, remove obstruction in the meridians, promote blo od circulation, and stop the pain, and it has been used to induce childbirth, ease the pai

n of labor, rectify delayed or irregular menstruation, abnormal menstruation, alleviate he avy bleeding and pain during menstruation, treat external injuries and irregular, muscle pain, rheumatoid arthritis, postpartum bleeding pain, tonsillitis, etc. Its roots and rhizome s are the main medicinal parts. The compounds used in the recording were Caulosides (B, C, D, G, H) and Leonticin D. (https://doi.org/10.1155/2021/5580341)

* Cellulite Mix. Cellulite, popularly called orange peel skin, affects mostly women and is f ound in more than 80% of women of post-pubertal age, which can be treated either med ically or cosmetically to enhance the appearance of this issue. Natural ingredients are pr eferable in cosmetic treatment due to their safety image. Several studies have shown th at various natural components are clinically effective. These indicate that plants are a pa rticularly rich source of providing components for cellulite treatment. Many active ingredi ents from medicinal plants, primarily in the form of standardized botanical extracts, can act synergistically on various biological targets and improve unwanted signs and sympto ms. Compounds in parenthesis have the same molecular weight.
(https://doi.org/10.3390/ph14090842)

* Chemical Peel is Acetone, Salicylic acid, Glycolic acid, and Lactic acid.

* Da Cheng Qi Tang is a 4-ingredient Chinese Medicine formula with Rhubarb (Da Huan g) as a principal ingredient. In this case Da Cheng Qi Tang is used to fight patterns like Yang Excess or Full Yang, Heat in Yang brightness Organs or Yang Excess. From a We stern Medicine standpoint, such patterns can give rise to a range of conditions such as pancreatis, appendicitis or cholecystitis for instance.

- Da Huang , as best described in the classic Divine Husbandman's Classic of the Mater ia Medica, "breaks up abdominal masses, accumulations, lingering Fluids, and harbored food by flushing them from the Stomach and Intestines, pushing out the old so that the n ew [can enter], unblocking [the passages for] food and drink, regulating the Middle [Burn er so that it can again] transform food and the five Yin Organs are calmed".

- Mang Xiao has stool-softening properties that helps the key herb (Rhubarb) in its purg ative action. Together they moisten Dryness as they drain downward.

- In general Zhi Shi's main actions are as follows: "Regulates the flow of Qi in the Middle Burner and reduces Food Stagnation. Moves Qi downward and helps constipation. Red uces Stagnant Phlegm and lessens distention and pain. For prolapse of organs when us ed with the appropriate herbs." In the context of Da Cheng Qi Tang, it is used because it dissipates clumps and reduces focal distention.

- Hou Pu disseminates the Qi and relieves the sensation of fullness. Together with Imma ture bitter orange (Zhi Shi), the other assistant, they assists in the expulsion of stool by moving the Qi. Even though the root of the condition is Heat, the resultant clumping lead s to severe Qi Stagnation. Moving the Qi is thus an important aspect of the formula. (ht tps://www.americandragon.com/Herb%20Formulas%20copy/DaChengQiTang.html)

* Foot Care Mix. Is hydrating and repairing, especially indicated to control of dryness, fis sures and pruritus of healthy diabetic foot. The mix protects the skin barrier and reinforc es its defenses to maintain the skin moisturized and healthy. Used for dry skin condition s, dry skin, burns, chapped or cracked skin, psoriasis, fractures and other conditions in healthy yet rough, textured skin, diabetic foot. A keratolytic, emollient, humectant, and s kin protectant mix. The recording plays the sound frequencies of urea, allantoin, dimethi cone, propylene glycol, glycerin, and retinol. Urea is a keratolytic agent. Allantoin is use d as emollient due to its moisturizing and keratolytic effect. Dimethicone is also used as moisturizer to treat or prevent dry skin, rough, scaly, itchy skin and minor skin irritations. Humectants like propylene lycol and glycerin draw in moisture from their surrounding en vironment. Retinol is used in the treatment dry skin, skin rash, skin peeling, blemishes a nd wrinkles, sunburn, itching, rough skin, skin cracks, eczema, and dermatitis. Works by healing wounds and increases the re-establishments of the normal skin, prevents the w ater loss, provides soothing effect. Improves wound healing by supplying oxygen and nu trients, Emollients penetrates deep into the skin to moisturize and softens dry cracked fe et. It also works by forming an oily layer on top of the skin that traps and prevents loss o f water.

* GH1504 is a novel organosilicon anticancer compound which exhibited potent in vitro cytotoxicity in a broad spectrum of human cancer cells, including prostate cancer (PCa) cells refractory to androgen deprivation therapy (ADT) and chemotherapy. Molecular stu dies identified several potential targets of GH1504, most notably androgen receptor (A R), AR variant 7 (AR-v7) and survivin. Mechanistically, GH1504 may promote the protei n turnover of AR, AR-v7 and survivin, thereby inducing apoptosis in ADT-resistant and c hemoresistant PCa cells. Animal studies demonstrated that GH1504 effectively inhibited the in vivo growth of ADT-resistant CWR22Rv1 and chemoresistant C4-2B-TaxR xenogr afts in subcutaneous and intraosseous models. Besides, GH1504 effectively suppresse d the in vitro proliferation of multiple cancer cell lines. GH1504 demonstrated high poten cy against all NCI-60 cancer cell lines, with an average GI50 value of 0.968 μM and 0.9 73 μM, respectively. The NCI-60 cancer panel holds cell lines representing leukemia, m elanoma, non-small-cell lung carcinoma, and cancers of the brain, ovary, breast, colon, kidney, and prostate. (https://doi.org/10.1016/j.neo.2021.11.006)

* Hai Feng Teng or Kadsura Interior (Caulis) stems
Hai Feng Teng Property: Pungent, bitter, slightly warm; heart and kidney meridians ente red.
Actions: Dispel wind-cold and dampness, unblock the channels and collaterals to treat b i zheng (painful obstruction syndrome) manifesting as stiff joints, lower back pain (with c old), and muscle aches and spasms.
Indications: Damp arthralgia, traumatic injury, asthma, chronic cough.
Kadsura Interior (Caulis) stems are used in traditional Chinese medicine with the traditio nal efficacy of tonifying and invigorating the blood, therefore being favored to treat blood deficiency (BD) widely. Due to its exceptional medicinal properties, Kadsurae Caulis is tr aditionally applied to tonify and invigorate blood in the TCM system, particularly to treat blood deficiency (BD) syndrome. It significantly increases the levels of hematocrit (HCT), hemoglobin (HGB), and red blood cells (RBC) in BD mice. In addition, it significantly inc

reased the serum levels of interleukin 3 (IL-3), granulocyte–macrophage colony-stimulating factor (GM-CSF), and macrophage-stimulating factor (M-CSF) in BD mice ($P < 0.01$). BD syndrome is often accompanied by clinical symptoms of pallor, atrophy, weight loss, reduced function of important immune hematopoietic organs, comprising the spleen and the thymus. Modern medicine has shown that BD syndrome embraced a wide range of anemia, including aplastic anemia, hemorrhagic anemia, and hemolytic anemia. The reduces of red blood cells (RBC), hemoglobin (HGB), hematocrit (HCT) concentration, and immunological function are common symptoms of these disorders.
(https://www.americandragon.com/Individualherbsupdate/HaiFengTeng.html)

* He Shou Wu (Radix Polygoni Multiflori) or Fo-Ti
Property: Bitter, sweet and astringent, slightly warm; kidney and liver meridians entered.
Actions: Tonify blood, supplement essence, check malaria, relieve toxicity, moisten intestine.
Indications:
A. Blood and essence deficiency syndrome.
B. Chronic malaria It is very indicated for chronic malaria of both qi and blood deficiency type, because He Shou Wu can check malaria. Furthermore, it can tonify blood to improve deficiency. He Shou Wu is indicated for ulcers and tuberculosis, because it can relieve toxicity, dissipate nodulation, in addition, it also has action of relieving itching.
C. Ulcers and tuberculosis.
D. Constipation due to intestinal dryness. He Shou Wu can smooth stool through moistening intestines, and tonifying deficiency.
(https://www.americandragon.com/Individualherbsupdate/HeShouWu.html)

* Hu Gu, Os Tigris
Tiger Bone or Jintiange (JTG) capsule is an approved drug developed as a substitute for tiger bone composed of bionic TB powder, in which peptides and proteins are primarily enriched from other bone extracts.
Hu Gu Property: Acrid, salty, warm, liver and kidney entered.
Actions: Dispels wind-(dampness), controls pain and strengthens tendons, ligaments and bones, disperses wind-cold. Indications: Dispel wind and alleviate pain, strengthen bones and relieve convulsion. Wind-damp bi with atrophied and weak lower back and legs, joint stiffness, migratory pain, spasms of the legs and difficulty moving the joints. Wind-cold bi with paralysis, spasms, and cold pain in the bones. It is contraindicated in case of blood deficiency with excessive fire.
TB has been mainly understood and used in TCM to relieve osteoporosis, bone injury, rheumatoid arthritis (RA), and reverses changes in serum metabolic profile of collagen-induced arthritic (CIA). In RA and its associated bone deterioration in CIA rats, JTG was able to attenuate the paw swelling and improve the cancellous bone structure, enhance one mineral density (BMD), and restore bone metabolism homeostasis. Hu Gu (TB) is pungent, warm; liver and kidney meridians entered. Dispel wind and alleviate pain, strengthen bones and relieve convulsion. Limbs contracture, palpitation, epilepsy, rectocele, anal fistula, arthritis. The recording plays the frequency of nine bioactive peptides identified from JTG.
(https://doi.org/10.2147/JIR.S338107) (

https://www.americandragon.com/Individualherbsupdate/HuGu.html)

* Huo Ma Ren (Semen Cannabis)
Property: Sweet, mild; large intestine, spleen and stomach meridians entered.
Actions: Moisten intestines for relaxing bowels.
Indications: Constipation due to intestinal dryness. Because it is sweet, mild and moist in property, and rich in oil, it can moisten intestines for relaxing bowels, and has the combined effect of nourishing and tonifying as well. It is suitable for the old, puerpera, and the weak with insufficient blood and body fluid who suffer from constipation due to intestinal dryness. (
https://www.americandragon.com/Individualherbsupdate/HuoMaRen.html)

* Hydrogen peroxide-Urea is mainly used as a disinfecting and bleaching agent in cosmetics and pharmaceuticals. As a drug, this compound is used in some preparations for the whitening of teeth. It is also used to relieve minor inflammation of gums, oral mucosal surfaces and lips including canker sores and dental irritation, and to emulsify and disperse earwax. Carbamide peroxide is also suitable as a disinfectant, e.g. for germ reduction on contact lens surfaces or as an antiseptic for mouthwashes, ear drops or for superficial wounds and ulcers. It may cause eye irritation.

* Luo Han Guo (Fructus Momordicae)
Property: Sweet, cool; lung and spleen meridians entered.
Actions: Clear lung-heat and moisten the intestine.
Indications: Constipation due to blood deficiency, cough due to phlegm-fire, whooping cough. Main actions according to TCM: Lubricates and cools the Lungs. Treats Lung Yin Deficiency. Dissipates nodules and swollen glands. Lubricates the Intestines and relieves constipation. Primary conditions or symptoms for which monk fruits may be prescribed by TCM doctors: Pneumonitis, Dry cough, Swollen lymph nodes, Constipation, Sore throat.
(https://www.americandragon.com/Individualherbsupdate/LuoHanGuo.html)

* Mitoxantrone, a drug for the treatment of advanced breast cancer, showed potential in upregulating pro-longevity gene expression, it is included among the list of top 13 discovered longevity-promoting chemicals. Mitoxantrone in Australia is an anthracenedione antineoplastic agent and an analgesic.. Mitoxantrone intercalates into and crosslinks DNA, thereby disrupting DNA and RNA replication. This agent also binds to topoisomerase II, resulting in DNA strand breaks and inhibition of DNA repair. Mitoxantrone is less cardiotoxic compared to doxorubicin. Mitoxantrone is an antineoplastic antibiotic that is used in the treatment of acute leukemia, lymphoma, and prostate and breast cancer, but also for late stage, severe multiple sclerosis. Mitoxantrone therapy is often accompanied by mild to moderate elevations in serum aminotransferase levels, but in typical doses it rarely causes clinically apparent, acute liver injury. A study conducted among 42 women with breast cancer showed great potential in mitoxantrone as a treatment for advanced breast cancer with mild side effects compared to traditional treatments, such as chemotherapy.

* Narciclasine, an Amaryllidaceae alkaloid with potent antitumor and anti-inflammatory properties attenuates diet-induced obesity. Narciclasine showed potential in upregulating pro-longevity gene expression, it is included among the list of top 13 discovered longevity-promoting chemicals. Beneficial therapeutical actions have been reported particularly in brain tumor models. The translation elongation factor eEF1A, which does not only participate in protein biosynthesis but also in the regulation of the actin cytoskeleton, was discovered as new direct target. Moreover, narciclasine was found to trigger actin stress fiber formation via the activation of the small GTPase RhoA. In a screening about the broad cytotoxic activities of narciclasine in the NCI panel of 60 human tumor cell lines, the mean IC50 of narciclasine was 15.5 nM. The panel holds cell lines representing leukemia, melanoma, non-small-cell lung carcinoma, and cancers of the brain, ovary, breast, colon, kidney, and prostate. Interestingly it showed that melanoma cell lines were the most sensitive tumor cells to narciclasine. In 2007, Dumont et al. showed that narciclasine was cytotoxic to all investigated cancer cell lines (IC50: 30 nM), whereas much higher concentrations were need to interfere with the viability of fibroblasts (IC50: 7.5 μM). Ingrassia et al. confirmed this selectivity towards cancer cells (mean IC50: 38 nM) and reported that endothelial cells (HUVECs) are more sensitive than fibroblasts, since narciclasine inhibited the proliferation of endothelial cells with an IC50 of approx. 90 nM. This points towards a possible antiangiogenic action of the alkaloid. In fact, unpublished data from our group confirm this hypothesis. In 1999, Mikami et al. demonstrated that narciclasine effectively prevents paw swelling in a rat arthritis model. They also showed that narciclasine suppresses the production of TNF-α in LPS-activated murine macrophages. The authors ascribed this effect to the pr otein synthesis-blocking action of narciclasine. In 2011, the alkaloid was reported to inhi bit LPS-triggered NO production in a murine macrophage cell line (RAW264) as well as the generation of TNF-α in a human monocytic cell line (THP-1). One year later, Lubahn et al. provided evidence that narcistatin, a water-soluble cyclic phosphate prodrug of nar ciclasine, was able to reduce inflammation (by approx. 70 %) and joint destruction (by approx. 50 %) in rat adjuvant-induced arthritis after disease onset. Moreover, narcistatin also decreased the production of pro-inflammatory cytokines in different types of leukocytes. In 2015, our group characterized the anti-inflammatory effect of a narciclasine-containing extract of Haemanthus coccineus in two murine models of inflammation (dermal edema formation by arachidonic acid or croton oil and kidney injury caused by unilateral ureteral obstruction). The extract blocked the pro-inflammatory activation of leukocytes and endothelial cells. Interestingly, we could not detect any action on the activation cascade of the most prominent pro-inflammatory transcription factor NFκB, but found a strong inhibition on the NFκB-dependent gene tra nscription in endothelial cell. (https://doi.org/10.1055/s-0042-115034)

* Niu Bang Zi or Burdock Seeds (Fructus Arctii)
Niu bang zi
Property: Pungent, bitter, cold; lung and stomach meridians entered.
Actions: Disperse wind-heat, clear the toxic heat, relieve sore throat, promote eruption.
Indications:
A. Wind-heat exterior syndrome or warm diseases at the defense system. Niu Bang Zi h as the action of dispersing inferior to some herbs, but it is good at clearing the throat. So

it is usually used to treat the wind-heat exterior syndrome manifested as swollen and pai nful throat or coughing with phlegm. It is especially suitable for the warm diseases at def ense system, because it can both disperse the pathogen in the defense system, and cle ar the toxic heat.
B. Heat toxin syndromes such as swollen and painful throat, ulcer and carbuncle, mump s. This herb clears toxic heat without congealing, apart from treating warm diseases at t he defense system, it also has the good effects of clearing the throat and subduing infla mmation. The indications of this herb are heat toxin syndromes such as swollen and pai nful throat, ulcer and carbuncle, mumps. It also has the action of lubricating the intestine s, so it can open the bowels by clearing the toxic heat. It is suitable to the above mentio ned diseases with the obstructed stool due to accumulation of heat.
C. Unsmooth eruption of measles at the early stage. It can treat unsmooth eruption of m easles and can release the exterior wind-heat and clear the interior toxic heat. So it is th e good herb for letting eruption out skin. It is not suitable for deficiency-cold loose stool because of its cold property and the action of lubricating the intestines. (https://www.am ericandragon.com/Individualherbsupdate/NiuBangZi.html)
Compounds from burdoch seeds arctiin (main active component) and arctigenin could r egulate the abnormal metabolic pathways associated with the development of Silicosis, which involve pantothenate and CoA biosynthesis, cysteine and methionine metabolism, linoleic acid metabolism, and arginine and proline metabolism successively. Research in dicated that arctigenin has the function of antioxidation, anti-inflammation, antitumor, an d neuron-protective activities. Recent studies have shown that arctigenin can also suppr ess renal interstitial fibrosis, repress TGF-β-induced epithelial-mesenchymal transition (EMT) in human lung cancer cells, and attenuate PQ-induced EMT and pulmonary fibro sis. Furthermore, the analysis of metabolomics, together with network topological analys is in different phases of silicosis, revealed that urine myristic acid, serum 4-hydroxyproli ne, and L-arginine could be regarded as diagnosis biomarkers in the early phase and fo rmation of pulmonary fibrosis in the latter phases of silicosis. Arctiin and arctigenin could downregulate the increased levels of myristic acid in the early phase and serum 4-hydro xyproline in the latter phase of Silicosis.

* Nutritional Supplement. Whey and casein proteins, ursolic acid, free branch-chained a mino acids (valine, isoleucine and leucine) and vitamin D (cholecalciferol, ergocalciferol). May improve walking performance both during short and long distance due to increase d mitochondrial functioning.

* Rehydration Therapy is sodium chloride (NaCl), trisodium citrate dihydrate (C6H9Na3 O9), potassium chloride (KCl), anhydrous glucose (C6H12O6), zinc sulphate (O4SZn), and water. Oral rehydration therapy ORT (low-osmolar) is suitable for people who are n ot dehydrated and those who show signs and symptoms of mild to moderate dehydratio n.

* Skin Lesions-Growths
Grape Seed Extract, Ascorbic Acid (vitamin C), Vitamin E, NAC (N-AcetylCysteine), Gr ape Seed Oil, Alpha Lipoic Acid, Resveratrol, and CoQ10. Used to correct Actinic Kerato sis and other skin growths. Encourage normal skin growth. Sun-damage and age spots

reversion. Healthy looking skin as it restores, moisturizes, and protects -anti-viral, anti-bacterial, anti-yeast, anti-aging.
-Resveratrol and Grape Seed Extract help to stifle the growth of abnormal skin cells, and encourage an apoptosis (a dying off) of those cells.
-N-Acetyl Cysteine, an amino acid derivative, helps to block the development of abnormal cells. CoQ10 helps to restore proper cellular function.
-Vitamin C is antibacterial, antiviral, antioxidant, and promotes the growth of normal skin. Vitamin E is an antioxidant needed for healthy skin growth.
-Alpha Lipoic Acid helps to reduce fine lines and wrinkles and Grape Seed Oil helps the skin regain some of its elasticity.

* SR12343 is a novel small molecule that inhibits IKK/NF-κB activation by disrupting the association between IKKβ and NEMO. SR12343 reduced senescence-associated beta-galactosidase (SA-β-gal) activity in oxidative stress-induced senescent mouse embryonic fibroblasts as well as in etoposide-induced senescent human IMR90 cells. Chronic administration of SR12343 to the Ercc1−/Δ and Zmpste24−/− mouse models of accelerated aging reduced markers of cellular senescence and SASP and improved multiple parameters of aging. SR12343 also reduced markers of senescence and increased muscle fiber size in 2-year-old WT mice. Taken together, these results demonstrate that IKK/NF-κB signaling pathway represents a promising target for reducing markers of cellular senescence, extending healthspan and treating age-related diseases. (https://doi.org/10.1111/acel.13486)

* Suan Zao Ren (Semen Ziziphi Spinosae)
Property: Sweet, sour, neutral; heart, liver and gallbladder meridians entered.
Actions: Tonify heart and nourish liver, induce tranquilization, check sweating.
Indications:
A. syndrome of unsteadiness of heart-mind. It has actions of tonifying yin and blood of heart and liver, also inducing tranquilization, so it is the key herb for nourishing heart and tranquilization.
B. Hyperhidrosis due to deficiency. It can check sweating so it can be indicated for spontaneous sweating due to deficiency and night sweat.
(https://www.americandragon.com/Individualherbsupdate/SuanZaoRen.html)

* TLK16998, increases IR autophosphorylation in the presence of insulin and also enhances downstream signaling events, including phosphorylation of IRS-1 and GLUT4 translocation. In addition, this compound significantly lowers blood glucose levels in two animal models of type 2 diabetes. Small-molecule drugs that act by producing insulin-dependent activation of the IR tyrosine kinase domains are potentially attractive for the treatment of type 2 diabetes. Moreover, agents with insulin-dependent activity might offer unique advantages in the control of hyperglycemia by modulation of their effects as insulin levels change in response to physiological stimuli.Two metabolic defects that seem to be central to the pathology of type 2 diabetes are impaired insulin secretion and the reduced ability of insulin to act on the major insulin-sensitive tissues. The combination of these defects results in an inability of the body to maintain glucose homeostasis leading to hyperglycemia and other metabolic disturbances. The decreased responsiveness to insuli

n, termed “insulin resistance,” is due to a reduced ability of insulin to activate its signalin g pathways. Insulin acts by binding to the α-subunits of the hetero-tetrameric (α,α,β,β) in sulin receptor (IR) and inducing autophosphorylation of the β-subunits. This autophosph orylation is performed by the cytoplasmic kinase domain (CKD) regions of the β-subunit s. Autophosphorylation of the IR CKD occurs in its juxtamembrane, activation loop, and COOH-terminus subdomains. CKD autophosphorylation initiates a cascade of signaling events that begin with the recruitment of specific substrates, such as insulin receptor su bstrate 1 (IRS-1), and includes activation of second messenger systems, such as phosp hatidylinositol (PI) 3-kinase, and translocation of glucose transporters (GLUT4) to the ce ll surface. In insulin-resistant tissues or cells, deficiencies have been demonstrated in se veral steps in this pathway, including autophosphorylation of the IR in response to insuli n binding. (https://doi.org/10.2337/diabetes.50.4.824)

* Zibotentan (ZD4054) is an orally available selective antagonist of the endothelin-A (E T-A) receptor with potential antineoplastic activity. Zibotentan binds selectively to the E T-A receptor, thereby inhibiting endothelin-mediated mechanisms that promote tumor ce ll proliferation. It was designed and tested on castration-resistant prostate cancer patient s, it is also proven to prevent hypertension and maintains cerebral perfusion. ZD4054 al so inhibited blood vessel growth.The most common adverse events were ETA (ETA receptor antagonism) mechanism related, including peripheral oedema, headache, and nasal congestion/rhinitis. ZD4054 has been administered orally in healthy volunteers in single doses up to 240mg and multiple doses of up to 100mg daily for 14 days, ZD4054 was well absorbed and was cleared via metabolism and urinary excretion with zibotentan-related material predominantly excreted via the urine. Analysis of the Phase 3 study in metastatic resistant prostate cancer indicated an increased risk and reduced time to onset of pneumonia in the patient group exposed 10mg once daily. In healthy male volunteers. The reproductive toxicology package indicates a risk of fetal toxicity. The inclusion of women of child-bearing potential would need to be assessed for any proposal based on the risk-benefit and the use of appropriate highly effective contraception. Preclinical CNS and CV safety study findings indicate that patients with a previous history of epilepsy, other CNS adverse events, or neurologic symptoms or signs consistent with acute or evolving spinal cord compression or CNS metastases should be excluded as should patients with NYHA grade II heart failure. ZD4054 is largely renally cleared, so the dose in patients with moderate to severe renal impairment would have to be re-evaluated. Zibotentan showed potential in upregulating pro-longevity gene expression, it is included among the list of top 13 discovered longevity-promoting chemicals.

1.3.1.50 RT-MB-62

https://archive.org/details/Resonant_Therapy-Molecular_Biology_62

AS1, EDG-5506, GS-441524, Macrogol-Electrolytes, Melittin-Apamin, Metoclopramide, Motilitone, Periplocin-Oleandrin-Ginkgetin, Revaprazan, Simeticone, Sodium Phenylbut yrate-Taurursodiol, Sprifermin,Tegoprazan, THCP, Vancomycin-Metronidazole-Cefuroxi me

* AS1 or Analgesic Screen 1 (4-propan-2-yl-N-pyridin-4-ylbenzamide) is a novel small m olecule which reverses the negative hedonic valence of noxious stimuli. AS1 does not a ppear to act directly upon serotonin, dopamine, opioid, adrenergic, or acetylcholine rece ptors, nor some of their transporter proteins, is very intriguing and suggests that AS1 ma y be acting upon an unconventional molecular target. Additionally, despite its profound e ffect upon valence, AS1 itself is neither aversive nor attractive, only influencing behavior in the context of aversive stimuli. In this, AS1 is very unusual. To the best of our knowled ge, no other known drug behaves in such a manner. In zebrafish experiments, AS1 reve rses aversion to noxious stimuli across multiple sensory modalities, rendering even phy sically harmful environments attractive. Analgesic Screen 1 (AS1), surprisingly elicited a ttraction to noxious painful heat. AS1 was similarly able to reverse the negative hedonic valence of other painful (chemical) and non-painful (dark) aversive stimuli without being inherently rewarding. AS1 relieves an aversion-imposed “brake” on dopamine release, a nd this unique mechanism may provide valuable insight into the development of new val ence-targeting analgesic drugs, as well as medications for other valence-related neurolo gical conditions, such as anxiety and post-traumatic stress disorder (PTSD).

* EDG-5506 is an orally administered small molecule myosin modulator designed to prot ect susceptible muscle fibers from the damage that occurs as a result of everyday activit ies in people living with dystrophinopathies including Becker and Duchenne Muscular D ystrophy (BMD, DMD). EDG-5506 presents a novel mechanism of action designed to se lectively limit the exaggerated muscle damage caused by the absence or loss of functio nal dystrophin. EDG-5506 has a favorable safety/tolerability profile.

* GS-441524 is a nucleoside analogue antiviral drug. It is the main plasma metabolite of the antiviral prodrug remdesivir, and has a half-life of around 24 hours in human patients. Remdesivir and GS-441524 were both found to be effective in vitro against feline coron avirus strains responsible for feline infectious peritonitis (FIP), a lethal systemic disease affecting domestic cats. GS-441524 is either similar to or more potent than remdesivir a gainst SARS-CoV-2 in cell culture, with some researchers arguing that GS-441524 woul d be better than remdesivir for the treatment of COVID-19. Specific advantages cited inc lude lower kidney and hepatotoxicity, longer half-life and exposure.

* Macrogol-Electrolytes. In Macrogol 4000, the addition of electrolytes does not influenc e effectiveness nor improves tolerability or safety, since there is no loss of electrolytes w ith macrogol 4000 treatment. It is used for short-term relief of constipation as well as for long-term use in constipation of various causes, including in multiple sclerosis and Parki nson's disease patients (an often-overlooked non-motor symptom) as well as constipati on caused by pharmaceutical drugs such as opioids and anticholinergics. There is no lo ss of effectiveness with long-term use (no habituation), and neither relevant disturbance s in electrolytes nor relevant changes to the intestinal microbiome occur. Macrogol 4000 can also be used in specific patient groups such as breast-feeding women, those on a l ow-sodium diet and diabetics with fructose intolerance. Macrogol preparations are one o

f the first-line treatments for constipation in both, children and adults. A review has confir med the efficacy and tolerability of macrogol 4000 compared with lactulose and macrog ol preparations with added electrolytes. The osmotic laxative is a good recommendation on pharmacoeconomic grounds as well.

* Melittin-Apamin bee are the major components of Honeybee venom. Bee venom has p owerful anti-inflammatory properties. And may benefit the health of your skin and immun e system. It may also improve certain medical conditions like rheumatoid arthritis, chroni c pain, peripheral nerve injury, neurodegenerative diseases such as Parkinson's diseas e, Alzheimer's disease, multiple sclerosis, as well as neurite outgrowth and regeneration after cortical neuron injury and cancer.

* Metoclopramide is a medication used for stomach and esophageal problems. It is com monly used to treat and prevent nausea and vomiting, to help with emptying of the stom ach in people with delayed stomach emptying, and to help with gastroesophageal reflux disease. It is also used to treat migraine headaches.

* Motilitone (DA-9701) is a botanical drug consisting of Corydalis Tuber and Pharbitidis Semen. It has multiple mechanisms of action such as prokinetic effects, fundus relaxatio n, and visceral analgesia, which are mediated by dopamine D2 and several serotonin re ceptors involved in gastrointestinal (GI) functions. Symptoms of functional dyspepsia ma y include: Pain or burning in the stomach, bloating, excessive belching, or nausea after eating. An early feeling of fullness when eating. The feeling of fullness also is called sati ety. In clinical studies, DA-9701 has been found to be beneficial for improvement of Fun ctional dyspepsia (FD) symptoms and GI functions in FD patients, while showing better safety compared to that associated with conventional medicines.

* Periplocin-Oleandrin-Ginkgetin are three novel senolytics discovered by artificial intelli gence (AI). Testing on human cells revealed that all three, ginkgetin, periplocin and olea ndrin, were able to remove senescent cells without damaging healthy cells. Cellular sen escence is a stress response characterised by a permanent cell cycle arrest and a proin flammatory secretome. In addition to its tumour suppressor role, senescence is involved in ageing and promotes many disease processes such as cancer, type 2 diabetes, oste oarthritis, and SARS-CoV-2 infection.

* Revaprazan is a drug that reduces gastric acid secretion which is used for the treatme nt of gastritis. It acts as an acid pump antagonist (potassium-competitive acid blocker). Revaprazan is a proton pump inhibitor which reversibly inhibits H+, K+-ATPase and is c urrently an investigational drug for the management of gastric and duodenal ulceration a nd other acid-related diseases.

* Simeticone is an anti-foaming agent used to reduce bloating, discomfort or pain cause d by excessive gas. Simeticone is a non-systemic surfactant which decreases the surfa ce tension of gas bubbles in the GI tract. This allows gas bubbles to leave the GI tract a s flatulence or belching. Simeticone does not reduce or prevent the formation of gas.

* Sodium Phenylbutyrate and Taurursodiol is a combination medication for the treatment of amyotrophic lateral sclerosis (ALS) and Alzheimer's disease. It contains sodium phen ylbutyrate and ursodoxicoltaurine, two chemicals that act by blocking cell death pathway s and improving mitochondrial energy production. Sodium phenylbutyrate/ursodoxicolta urine acts by blocking cell death pathways in mitochondria and in the endoplasmic retic ulum. Sodium phenylbutyrate is a chemical chaperone that helps proteins maintain their normal conformation, preventing aggregation that may lead to cell death. Ursodoxicolta urine improves mitochondrial energy production.

* Sprifermin is a recombinant human fibroblast growth factor 18 (rhFGF18) analog, whic h is under development for the treatment of osteoarthritis. In trials, sprifermin was well t olerated with no severe adverse events associated with the treatment. A placebo control led, multi-center study demonstrated that sprifermin was able to promote statistically sig nificant improvement in cartilage thickness relative to control in a dose-dependent mann er.

* Tegoprazan, a novel potassium-competitive acid blocker (P-CAB), is a next-generation therapeutics developed for the treatment of acid-related gastrointestinal diseases such as gastroesophageal reflux disease (GERD) and peptic ulcers. Although proton pump in hibitors (PPIs) are the mainstay of therapy for GERD and its complications, they have s everal limitations, including incomplete symptom resolution. Potassium-competitive acid blockers (P-CABs) were developed to address the limitations of PPIs as well as the nee d for improved antisecretory effects. A highly selective inhibitor of the H+/K+-ATPase, te goprazan is also safe and effective for nocturnal acid breakthrough (NAB) and motility. T egoprazan’s strong and sustained effect is due to its ability to be slowly cleared from the gastric glands and exertion of effects independent of acid levels. It has also been obser ved to be efficacious independent of food intake.

* THCP or Delta-9-tetrahydrocannabiphoral, is a cannabinoid related closely to THC and found in very low concentrations in the cannabis plant. THCP is the strongest naturally o ccurring cannabinoid currently known. Like other cannabinoids, THCP interacts with the endocannabinoid system in the body, which can affect mood, pain perception, and other bodily functions. While research on THCP is still in its early stages, preliminary studies s uggest that it may have more potent anti-inflammatory, analgesic, and neuroprotective p roperties compared to other cannabinoids like THC and CBD.

* Vancomycin-Metronidazole-Cefuroxime is an antibiotic combination treatment for intra-abdominal infections in adults.

1.3.1.51 RT-MB-63

https://archive.org/details/Resonant_Therapy-Molecular_Biology_63

A485, Hi1a Peptide, Hydroxocobalamin, Hypoxen-Levocarnitine, Immunoglobulin Thera py, Intralipid-IV Fat Emulsion, Lipophilic Drug Poisoning, MaSAMP Peptide, MU1140, P henelzine, Pralidoxime, Protirelin, Snakebite Antivenom 95Mat5, ZCAN262, Zosurabalpi

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* A485 is a small molecule — colloquially known as “prohiberin” — that inhibits proteins that modulate gene expression, triggering the release of neutrophils and other white blood cells from bone marrow. The researchers hope that the discovery could help human patients with neutropenia, or low white blood cell counts, which is common in those fighting infections and undergoing chemotherapy. A-485 is a potent and selective HAT inhibitor which exhibits potent activity in most multiple myeloma cell lines, and in a subset of acute myeloid leukaemia lines and non-Hodgkin’s lymphoma lines. A-485 induces a comparable decrease in H3K27Ac in all five prostate cancer cell lines. In tumour-bearing animals, dosing with A-485 for seven days induces a decrease in the mRNA levels of MYC and the AR-dependent gene SLC45A3 at three hours post-dosing, and (for MYC) a decrease in the protein level, indicating that A-485 inhibits p300-mediated transcriptional activity in vivo. Currently, the main treatment for low white blood cell counts is G-CSF, or granulocyte colony stimulating factor, which is produced by the body and can be administered as a drug. But it has a long-lasting effect, which can be harmful in some circumstances, limiting its wider clinical use. A485 is just as potent as G-CSF but less enduring, with white blood cell counts dropping back to normal by the 12-hour mark. A485 could help restore bone marrow function in patients with bone marrow failure -more likely to have infections due to diminished white blood cell counts. Myelodysplastic syndrome is a group of cancers in which blood cells in the bone marrow don’t properly develop, and chemotherapy-induced bacterial infections, some of which are potentially lethal.

* Hi1a Peptide or Pi-hexatoxin-Hi1a Peptide, blocks acid-sensing ion channels in the heart, so that death messages are blocked. As a result, cell death is reduced and heart cell survival increases. May be used to develop therapeutics to treat ischemic conditions like stroke, myocardial infarction, and transplants.

* Hydroxocobalamin, also known as vitamin B12a, is a vitamin found in food and used as a dietary supplement. As a supplement it is used to treat vitamin B12 deficiency including pernicious anemia. Other uses include treatment for cyanide poisoning, Leber's optic atrophy, and toxic amblyopia. Hydroxocobalamin is first line therapy for people with cyanide poisoning. Hydroxocobalamin converts cyanide to the much less toxic cyanocobalamin. Cyanocobalamin is renally cleared. The use of hydroxocobalamin became first line due to its low adverse risk profile, rapid onset of action, and ease of use in the prehospital setting.

* Hypoxen-Levocarnitine for pefornance enhancement. Hypoxen is under laboratory studies in Russia as a potential regulator of cell metabolism. It is purported to affect mitochondrial function, though this has not been proven in any high-quality, peer-reviewed publications. Intended uses,
- to improve performance in extreme and adverse conditions, accompanied by a lack of oxygen (highlands, the conditions of the Arctic, underwater work, etc.);
- mental and physical strain, camera work and other intense stress, accompanied by

chronic fatigue and fatigue;
- in the complex therapy of severe traumatic lesions, blood loss, extensive surgery, respiratory diseases (bronchial asthma, pneumonia, obstructive bronchitis);
- as part of the complex therapy of stable angina (prevention of angina attacks), arterial hypertension, chronic heart failure I and II functional class according to NYHA.
Levocarnitine or L-Carnitine is best known for its role in helping to ”shuttle” long-chain fatty acids into mitochondria to produce energy. In people with peripheral artery disease (PAD), L-carnitine can help reduce intermittent claudication (leg pain during exercise) and improve exercise capacity. However, in healthy people, supplementation with L-carnitine does not appear to improve exercise capacity or performance. L-carnitine may help reduce exercise-induced muscle soreness and muscle damage, particularly following resistance exercise.

* Immunoglobulin Therapy is a mixture of antibodies (normal human immunoglobulin or NHIG) to treat several health conditions. These conditions include primary immunodeficiency, immune thrombocytopenic purpura, chronic inflammatory demyelinating polyneuropathy, Kawasaki disease, certain cases of HIV/AIDS and measles, Guillain-Barré syndrome, and certain other infections when a more specific immunoglobulin is not available. The mix plays the sound frequencies -molecular mass-of, IGHE, IGHD, IGHM Membrane-bound -mIgM, IGHM Secreted -sIgM, IGHA1, IGHA2, IGHG1, IGHG2, IGHG3, IGHG4.

* Intralipid (I.V. Intravenous Fat Emulsion) is indicated as a source of calories and essential fatty acids for adult and pediatric patients requiring parenteral nutrition (PN) and as a source of essential fatty acids for prevention of essential fatty acid deficiency (EFAD).
Intralipid (a parenteral nutritional supplement approved worldwide) is also a relatively new, safe, and efficacious treatment modality for severe cardiovascular and neurological toxicity provoked by accidental and intentional poisoning with lipophilic drugs. This emerging intervention is already used successfully in dogs, cats, and other animals poisoned by ivermectin, moxidectin, permethrin, baclofen, lidocaine, and other lipophilic drugs i.e. bromethalin. Treated animals often exhibit prompt recovery with no reported acute adverse events nor long-term sequelae. Intralipid is, Phosphatidylethanolamine, Linoleic acid, Oleic acid, Palmitic acid, α-Linolenic acid, Stearic acid, Glycerin, Water

* Lipophilic drug poisoning in pets induces uncoupling in mitochondrial oxidative phosphorylation, which causes a decrease in adenosine triphosphate (ATP) synthesis. The decreased ATP inhibits the activity of the Na/K ATPase enzyme, thereby leading to a subsequent buildup of cerebral spinal fluid (CSF) and vacuolization of myelin. The excess CSF results in increased intracranial pressure, which in turn permanently damages neuronal axons. This damage to the central nervous system can cause paralysis, convulsions, and death. The recording plays the sound frequencies of, -Potassium-transporting ATPase alpha chain 2 AT12A which catalyzes the hydrolysis of ATP coupled with the exchange of H+ and K+ ions across the plasma membrane. It is also responsible for potassium absorption in various tissues

-Adenosine triphosphate (ATP) nucleotide which provides energy to drive and support many processes in living cells, such as muscle contraction, nerve impulse propagation, condensate dissolution, and chemical synthesis
-O2 oxygen used to maintain the proton motive force in oxidative phosphorylation of ATP

* MaSAMP Peptide is a stable antimicrobial peptide with dual functions of treating and preventing citrus Huanglongbing, citrus greening disease or yellow dragon disease. It is a novel class of stable antimicrobial peptides (SAMPs) from Australian finger lime and other HLB-tolerant citrus close relatives, which has dual functions of inhibiting CLas growth in HLB-positive trees and activating host immunity to prevent new infections of vector-transmitted phloem-limited bacterium Candidatus Liberibacter asiaticus (CLas). MaSAMP is very sensitive to human endopeptidase Pepsin, a major gastric enzyme produced by stomach chief cells. Thus, MaSAMP in Australian finger lime has already been consumed by humans for hundreds of years and can be easily digested. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8017978/)

* MU1140 (Mutacin 1140) is a groundbreaking lantibiotic -lanthionine-containing antibiotics- produced by Streptotoccus mutans which acts via a novel mechanism of action that may limit the development of resistance. MU1140 demonstrated activity against all Gram-positive organisms tested, including oxacillin- and vancomycin-resistant Staphylococcus aureus and vancomycin-resistant Enterococcus faecalis (VREF). No activity was observed against Gram-negative bacteria or yeast. Time–kill studies revealed that MU1140 was rapidly bactericidal against Streptococcus pneumoniae and multidrug-resistant S. aureus, whilst it was bacteriostatic against VREF. It has been extensively characterised with regard to its physical and chemical properties and its role in promoting colonisation of the oral cavity by the producer strain.

* Phenelzine, a small L1 mimetic molecule and monoamine oxidase inhibitor commonly prescribed for its antidepressant effects, has been the subject of many adhesion analyses assessing the quality of cellular adhesion in the presence of varied cell types. Most inquiries into the adhesive properties of phenelzine have been centered around its effect on L1 adhesion molecules. Two studies by Ri et al. found that phenelzine is capable of stimulating functional recovery, remyelination, and neuronal survival in both larval zebrafish and young mice through upregulation of L1.1 protein levels.

* Pralidoxime is typically used in cases of organophosphate poisoning. Organophosphates such as sarin bind to the hydroxy component (the esteric site) of the active site of the acetylcholinesterase enzyme, thereby blocking its activity. Pralidoxime binds to the other half (the unblocked, anionic site) of the active site and then displaces the phosphate from the serine residue. The conjoined poison / antidote then unbinds from the site, and thus regenerates the fully functional enzyme. Some phosphate-acetylcholinesterase conjugates continue to react after the phosphate docks to the esteric site, evolving into a more recalcitrant state. This process is known as aging. Aged phosphate-acetylcholinesterase conjugate are resistant to antidotes such as pralidoxime. Pralidoxime is only effective in organophosphate toxicity. It has no

beneficial effects if the acetylcholinesterase enzyme is carbamylated, as occurs with neostigmine, pyridostigmine, or insecticides such as carbaryl.

* Protirelin is the pharmaceutical form of Thyrotropin-releasing hormone (TRH) a hypophysiotropic hormone produced by neurons in the hypothalamus that stimulates the release of thyroid-stimulating hormone (TSH) and prolactin from the anterior pituitary. TRH has been used clinically for the treatment of spinocerebellar degeneration and disturbance of consciousness in humans. TRH has anti-depressant and anti-suicidal properties, and in 2012 the U.S. Army awarded a research grant to develop a TRH nasal spray in order to prevent suicide amongst its ranks. TRH has been shown in mice to be an anti-aging agent with a broad spectrum of activities that, because of their actions, suggest that TRH has a fundamental role in the regulation of metabolic and hormonal functions.

* Snakebite Antivenom 95Mat5 is effective against the venom of elapids, a major medically relevant family of snakes that includes cobras, kraits, and mambas. 95Mat5, protects against purified α-bungarotoxin (B. multicinctus, krait), also completely neutralizes the neurotoxin-rich whole venoms of N. kaouthia (monocellate cobra) and D. polylepis (black mamba) and prolongs survival against O. hannah (king cobra). While 95Mat5 is effective against the venom of all elapids, it does not block the venom of vipers—the second group of venomous snakes. Tests on mice injected with toxins from the many-banded krait, Indian spitting cobra, black mamba and king cobra showed mice were not only protected from death, but also paralysis. 95Mat5 amino acid sequence is, GGTFSSYA YIPIFGTA IPLRWYESGPYESGV QSISSY DASSLQ QQSYSTP

* ZCAN262, a small molecule, both reduced multiple sclerosis (MS)-like symptoms and showed promise in repairing myelin in two different animal models. ZCAN262 has potent effects in restoring neurological function and myelination while reducing the immune response in experimental autoimmune encephalitis and cuprizone MS mouse models without affecting basal neurotransmission or learning and memory. MS is a degenerative neurological disease that has a broad cache of increasingly debilitating symptoms including coordination and cognition decline, muscle weakness, incontinence, depression and paralysis. While inhibition of the AMPA and NMDA glutamate receptors was able to restore neurological deficits in a rodent model, they have previously also come with serious side effects. This new compound demonstrated it could target sites to regulate AMPA function, delivering neuroprotection without otherwise impacting the central nervous system.

* Zosurabalpin id a novel antibiotic designed to address bacterial strains resistant to most existing antibiotics, particularly those causing severe infections with high mortality rates. Resistance is more common among so-called gram-negative bacteria, which have two membranes that are difficult for many antibiotics to pass through. One of them, Acinetobacter baumannii, is one of the great threats in hospitals. It was very common during the Covid-19 pandemic. Zosurabalpine overcomes the defenses that usually make this bacteria resistant, by applying a different mechanism. It blocks the molecule lipopolysaccharide from reaching the surface of the bacteria, where it’s

necessary to create the outer membrane of these microorganisms. The antibiotic achieves this by overcoming only one of the two membranes that gram-negative bacteria have. Without that outer membrane, A. baumannii is less likely to survive and it becomes vulnerable to other antibiotics, which could be combined with zosurabalpine to treat these types of infections.

1.3.2 Genetic Pathways

The sound frequencies in these recordings are engineered to acoustically map genetic pathways, using frequencies derived from either the molar mass or scalar octave reson ance of key molecular components.

This includes DNA sequences, RNA transcripts, and regulatory proteins, translating their biochemical interactions into harmonic patterns. By sonifying these elements, the record ings reflect the vibrational signatures of genetic expression, offering an auditory represe ntation of transcriptional activity and epigenetic modulation.

Hence, potentially enabling frequency-based modulation of cellular signaling. The data source is Malacards a website in progress.

1.3.2.1 RT-MB-26

https://archive.org/details/Resonant_Therapy-Molecular_Biology_26

Genetic Superpathways-Bone Deterioration, Genetic Superpathways-Bone Remodeling, Genetic Superpathways-Bone Structure, Genetic Superpathways-Chronic Venous Insufficiency, Genetic Superpathways-Compulsive Gambling, Genetic Superpathways-Joint Disorders, Genetic Superpathways-Limb Ischemia P1, Genetic Superpathways-Limb Ischemia P2, Genetic Superpathways-Personality Disorders, Genetics-Allergic Rhinitis, Genetics-Alopecia Androgenetic1, Genetics-Bone Resorption, Genetics-Cauda Equina Syndrome, Genetics-Cerebrospinal Fluid Leaks, Genetics-Dry Eye P1, Genetics-Dry Eye P2, Genetics-Femur Head Necrosis, Genetics-Foot Drop, Genetics-Intermittent Claudication, Genetics-Mite Infestation, Genetics-Munchausen By Proxy, Genetics-Peroneal Nerve Paralysis, Genetics-Polyradiculopathy, Genetics-Post-Thrombotic Syndrome, Genetics-Presbyopia, Genetics-Seborrheic Dermatitis, Genetics-Skin Conditions, Genetics-Skin Disease, Genetics-Wrinkles, Important Genes-Chronic Sinus Problems

* Allergic Rhinitis, also known as hay fever, is related to keratoconjunctivitis and atopy, and has symptoms including history of seasonal allergies, conjunctival hyperemia and rhinorrhea. An important gene associated with Allergic Rhinitis is IL13 (Interleukin 13), and among its related pathways are Cytokines and Inflammatory Response and OX40 Pathway. The drugs phenylpropanolamine hydrochloride and flunisolide have been mentioned in the context of this disorder. Affiliated tissues include testes, eye and skin,

and related mouse phenotypes are digestive/alimentary and hematopoietic system. A rhinitis that is an allergic inflammation and irritation of the nasal airways involving sneezing, runny nose, nasal congestion, itching and tearing of the eyes caused by exposure to an allergen such as pollen, dust, mold, animal dander and droppings of cockroaches or house dust mites. (http://www.malacards.org/card/allergic_rhinitis)

* Alopecia, Androgenetic, 1, also known as androgenetic alopecia, is related to prostate cancer and alopecia, androgenetic, 3, and has symptoms including alopecia An important gene associated with Alopecia, Androgenetic, 1 is AFA1 (Alopecia, Androgenetic), and among its related pathways are Nongenotropic Androgen signaling and Transcription_Role of VDR in regulation of genes involved in osteoporosis. Affiliated tissues include testes, prostate and skin, and related mouse phenotypes are endocrine/exocrine gland and muscle. Androgenetic alopecia is a common form of hair loss in both men and women. In men, this condition is also known as male-pattern baldness. Hair is lost in a well-defined pattern, beginning above both temples. Over time, the hairline recedes to form a characteristic "M" shape. Hair also thins at the crown (near the top of the head), often progressing to partial or complete baldness. Mutations in the AR gene have also been associated with androgenetic alopecia. (http://www.malacards.org/card/alopecia_androgenetic_1)

* Bone Deterioration Disease is related to degenerative disc disease and spinal stenosis. An important gene associated with Bone Deterioration Disease is IVD (Isovaleryl-CoA Dehydrogenase), and among its related pathways are Spinal Cord Injury and Cardiomyocyte Differentiation through BMP Receptors. Affiliated tissues include bone, bone and breast, and related mouse phenotypes are limbs/digits/tail and skeleton. A bone structure disease that results in change or damage of structure located in bone. The recording includes related genes and Superpathways. (http://www.malacards.org/card/bone_deterioration_disease)

* Bone Remodeling Disease is related to hyperostosis and bone resorption disease. An important gene associated with Bone Remodeling Disease is BGLAP (Bone Gamma-Carboxyglutamate Protein), and among its related pathways are Vitamin D synthesis and FGF signaling pathway. Affiliated tissues include bone, bone and prostate, and related mouse phenotypes are respiratory system and cardiovascular system. A bone disease that results in formation or resorption abnormalities located in bone. The recording includes Superpathways and related genes. (http://www.malacards.org/card/bone_remodeling_disease)

* Bone Resorption Disease is related to osteoporosis and osteitis fibrosa. An important gene associated with Bone Resorption Disease is BGLAP (Bone Gamma-Carboxyglutamate Protein). Affiliated tissues include bone, breast and prostate. A bone remodeling disease that results in an abnormal decrease of bone density or mass. (http://www.malacards.org/card/bone_resorption_disease)

* Bone Structure Disease is related to spondylolisthesis and scoliosis. An important gene associated with Bone Structure Disease is IVD (Isovaleryl-CoA Dehydrogenase),

and among its related pathways are Spinal Cord Injury and Protein digestion and absorption. Affiliated tissues include bone, bone marrow and prostate, and related mouse phenotypes are hearing/vestibular/ear and limbs/digits/tail. A bone disease that has material basis in an abnormality in the location or function of the skeletal structure. The recording includes Superpathways and related genes. (http://www.malacards.org/card/bone_structure_disease)

* Cauda Equina Syndrome, also known as polyradiculopathy, is related to cauda equina neoplasm and cauda equina intradural extramedullary astrocytoma, and has symptoms including edema of spinal cord, radicular pain and pain in spine. An important gene associated with Cauda Equina Syndrome is DPYSL3 (Dihydropyrimidinase Like 3), and among its related pathways are Calcineurin-regulated NFAT-dependent transcription in lymphocytes and BDNF signaling pathway. Affiliated tissues include spinal cord, b cells and bone, and related mouse phenotypes are hearing/vestibular/ear and limbs/digits/tail. A peripheral nervous system disease that involves an acute loss of function of the lumbar plexus, neurologic elements (nerve roots) of the spinal canal below the termination (conus) of the spinal cord. (http://www.malacards.org/card/cauda_equina_syndrome)

* Cerebrospinal Fluid Leak, also known as spinal cerebrospinal fluid leak, liquorrhea CSF, is related to spontaneous intracranial hypotension and intracranial hypotension, and has symptoms including neuromuscular manifestations, neurobehavioral manifestations and vertigo. An important gene associated with Cerebrospinal Fluid Leak is PTGDS (Prostaglandin D2 Synthase). Affiliated tissues include brain, pituitary and bone. (http://www.malacards.org/card/cerebrospinal_fluid_leak)

* Chronic Frontal Sinusitis is related to frontal sinusitis and sinusitis. An important gene associated with Chronic Frontal Sinusitis is RHNO1 (RAD9-HUS1-RAD1 Interacting Nuclear Orphan 1). Affiliated tissues include bone. A frontal sinusitis which lasts for 12 weeks or more. This causes steady headache, localized tenderness and intermittent, purulent nasal and postnasal drainage. Chronic Maxillary Sinusitis, also known as chronic antritis, is related to maxillary sinusitis and sinusitis. An important gene associated with Chronic Maxillary Sinusitis is MPO (Myeloperoxidase). Affiliated tissues include tonsil, testes and skin. Ethmoid Sinusitis, also known as ethmoidal sinusitis, is related to rhabdomyosarcoma and scotoma. An important gene associated with Ethmoid Sinusitis is MUC7 (Mucin 7, Secreted). Affiliated tissues include eye, prostate and brain. A sinusitis which involves infection of ethmoid sinuses that causes pain or pressure behind and between the eyes, tearing, and headache over the forehead. Chronic Sphenoidal Sinusitis, also known as sphenoidal sinus-chr., is related to sphenoid sinusitis and sinusitis. An important gene associated with Chronic Sphenoidal Sinusitis is GOLPH3 (Golgi Phosphoprotein 3).

* Chronic Venous Insufficiency is related to peripheral artery disease and venous insufficiency. An important gene associated with Chronic Venous Insufficiency is ITGA4 (Integrin Subunit Alpha 4), and among its related pathways are Dissolution of Fibrin Clot and African trypanosomiasis. Affiliated tissues include kidney, liver and endothelial, and

related mouse phenotypes are neoplasm and respiratory system. A medical condition in which the veins cannot pump enough blood back to the heart. The most common cause of CVI is superficial venous reflux. As functional venous valves are required to provide for efficient blood return from the lower extremities, this condition typically affects the legs. (http://www.malacards.org/card/chronic_venous_insufficiency)

* Compulsive Gambling, also known as pathological gambling, is related to antisocial personality disorder and cocaine dependence. It is an impulse control disorder that involves the uncontrollable impulse to gamble, irrespective of the interference the behaviour has on the individual's life. Many people enjoy gambling, whether it's betting on a horse or playing poker on the internet. Most people who gamble don't have a problem, but some lose control of their gambling. Signs of problem gambling include always thinking about gambling lying about gambling spending work or family time gambling feeling bad after you gamble, but not quitting gambling with money you need for other things. -Neurotransmitter Clearance In The Synaptic Cleft - MAOA, SLC6A3 - Nicotine Pathway (Dopaminergic Neuron), Pharmacodynamics - DRD2, DRD3, DRD4

* Dry Eye Syndrome, also known as dry eye syndromes, is related to Sjogren's syndrome and Kenny-Caffey syndrome, type 1, and has symptoms including dryness of eye, and dacryops. An important gene associated with Dry Eye Syndrome is AQP5 (Aquaporin 5), and among its related pathways are Malaria and Stabilization and expansion of the E-cadherin adherens junction. The drugs hydroxyethyl cellulose and sodium chloride granules have been mentioned in the context of this disorder. Affiliated tissues include eye, salivary gland and thyroid, and related mouse phenotypes are muscle and digestive/alimentary. Dry eye syndrome is the condition of having dry eyes. Dry eye occurs when either the eye does not produce enough tears or when the tears evaporate too quickly. Other associated symptoms include irritation, redness, discharge, and easily fatigued eyes. Blurred vision may also occur. The symptoms can range from mild and occasional to severe and continuous. Scarring of the cornea may occur in some cases. It affects 5-34% of people to some degree depending on the population looked at. Among older people it affects up to 70%. In China it affects about 17% of people. (http://www.malacards.org/card/dry_eye_syndrome)

* Femur head necrosis or Avascular Necrosis of the Femoral Head is related to legg-calve-perthes disease and familial avascular necrosis of the femoral head, and has symptoms including avascular necrosis of the capital femoral epiphysis An important gene associated with Avascular Necrosis of the Femoral Head is COL2A1 (Collagen Type II Alpha 1 Chain), and among its related pathways are Oxidative Stress and Detoxification of Reactive Oxygen Species. Affiliated tissues include bone, bone marrow and endothelial, and related mouse phenotypes are cardiovascular system and vision/eye. A disease characterized by mechanical failure of the subchondral bone, and degeneration of the hip joint. It usually leads to destruction of the hip joint in the third to fifth decade of life. The clinical manifestations, such as pain on exertion, a limping gait, and a discrepancy in leg length, cause considerable disability. (http://www.malacards.org/card/avascular_necrosis_of_the_femoral_head)

* Foot Drop is related to charcot-marie-tooth disease, type 1e and diffuse large b-cell lymphoma. An important gene associated with Foot Drop is ACTA1 (Actin, Alpha 1, Skeletal Muscle), and among its related pathways are Striated Muscle Contraction and Neural Crest Differentiation. Affiliated tissues include brain, bone and spinal cord, and related mouse phenotypes are behavior/neurological and muscle. Foot drop describes the inability to raise the front part of the foot due to weakness or paralysis of the muscles that lift the foot. Causes include: neurodegenerative disorders of the brain that cause muscular problems, such as multiple sclerosis, stroke, and cerebral palsy; motor neuron disorders such as polio, some forms of spinal muscular atrophy and amyotrophic lateral sclerosis (commonly known as Lou Gehrig disease); injury to the nerve roots, such as in spinal stenosis; peripheral nerve disorders such as Charcot-Marie-Tooth disease or acquired peripheral neuropathy; local compression or damage to the peroneal nerve as it passes across the fibular bone below the knee; and muscle disorders, such as muscular dystrophy or myositis. (http://www.malacards.org/card/foot_drop)

* Intermittent Claudication, also known as intermittent claudication nos, is related to peripheral artery disease and coronary artery disease, and has symptoms including asthenia, body temperature changes and cyanosis. An important gene associated with Intermittent Claudication is HTR2A (5-Hydroxytryptamine Receptor 2A), and among its related pathways are Complement and coagulation cascades and Formation of Fibrin Clot (Clotting Cascade). The drugs pentoxifylline and cilostazol have been mentioned in the context of this disorder. Affiliated tissues include endothelial, bone and testes, and related mouse phenotypes are digestive/alimentary and liver/biliary system. Intermittent claudication is a symptom that describes muscle pain (ache, cramp, numbness or sense of fatigue), classically in the calf muscle, which occurs during exercise, such as walking, and is relieved by a short period of rest. It is classically associated with early-stage peripheral artery disease, and can progress to critical limb ischemia unless treated or risk factors are modified. (http://www.malacards.org/card/intermittent_claudication)

* Joint Disorders, also known as arthropathy, is related to rheumatoid arthritis and panner disease, and has symptoms including arthralgia, back pain and metatarsalgia. An important gene associated with Joint Disorders is IL6 (Interleukin 6), and among its related pathways are Dissolution of Fibrin Clot and amb2 Integrin signaling. Affiliated tissues include bone, bone marrow and testes, and related mouse phenotypes are muscle and neoplasm. An arthropathy, a disease of a joint. A joint is where two or more bones come together, like the knee, hip, elbow, or shoulder. joints can be damaged by many types of injuries or diseases, including arthritis - inflammation of a joint. it causes pain, stiffness, and swelling. over time, the joint can become severely damaged. (http://www.malacards.org/card/joint_disorders)

* Limb Ischemia is related to gastric dilatation and coronary artery disease. An important gene associated with Limb Ischemia is VEGFA (Vascular Endothelial Growth Factor A), and among its related pathways are Cell adhesion_Plasmin signaling and Integrins in angiogenesis. Affiliated tissues include bone, bone marrow and heart, and related mouse phenotypes are respiratory system and neoplasm. A restriction in blood supply to

limbs, causing a shortage of oxygen and glucose needed for cellular metabolism (to keep tissue alive). (http://www.malacards.org/card/limb_ischemia)

* Mite Infestation, also known as mite infestations, is related to scabies and trombiculiasis. An important gene associated with Mite Infestation is CFTR (Cystic Fibrosis Transmembrane Conductance Regulator), and among its related pathways are Pancreatic secretion and Antiarrhythmic Pathway, Pharmacodynamics. Affiliated tissues include skin and t cells. A parasitic ectoparasitic infectious disease that involves infestation of mites belonging to the family Sarcoptidae, Trombiculidae and Demodicidae. (http://www.malacards.org/card/mite_infestation)

* Munchausen by Proxy, also known as munchausen by proxy syndrome, is related to factitious disorder and maturity-onset diabetes of the young, type 13. An important gene associated with Munchausen by Proxy is ABCC8 (ATP Binding Cassette Subfamily C Member 8), and among its related pathways are Potassium Channels and Integration of energy metabolism. Affiliated tissues include brain, and related mouse phenotype endocrine/exocrine gland. A factitious disorder that involves a care giver's deliberate exaggeration, fabrication, and/or induce physical, psychological, behavioral, and/or mental health problems in others. (http://www.malacards.org/card/munchausen_by_proxy)

* Peroneal Nerve Paralysis, also known as peroneal nerve palsy, is related to osteopetrosis and thrombotic thrombocytopenic purpura. An important gene associated with Peroneal Nerve Paralysis is TBXAS1 (Thromboxane A Synthase 1). A paralysis on common fibular nerve that affects patient’s ability to lift the foot at the ankle. Peroneal nerve paralysis usually leads to neuromuscular disorder, peroneal nerve injury, or foot drop. (http://www.malacards.org/card/peroneal_nerve_paralysis)

* Personality disorders are a group of mental illnesses. They involve long-term patterns of thoughts and behaviors that are unhealthy and inflexible. The behaviors cause serious problems with relationships and work. People with personality disorders have trouble dealing with everyday stresses and problems. they often have stormy relationships with other people. The cause of personality disorders is unknown. However, genes and childhood experiences may play a role. The symptoms of each personality disorder are different, they can mild or severe. People with personality disorders may have trouble realizing that they have a problem, to them, their thoughts are normal, and they often blame others for their problems. They may try to get help because of their problems with relationships and work. treatment usually includes talk therapy and sometimes medicine. -Biogenic Amine Synthesis - COMT, MAOA, TPH1 - Nicotine Pathway (Dopaminergic Neuron), Pharmacodynamics - DRD2, DRD3, DRD4

* Polyradiculopathy is related to cauda equina syndrome and polyradiculoneuropathy. An important gene associated with Polyradiculopathy is COL6A1 (Collagen Type VI Alpha 1 Chain), and among its related pathways are Heart Development and Degradation of the extracellular matrix. Affiliated tissues include cervix. Radiculopathy refers to a set of conditions in which one or more nerves are affected and do not work

properly (a neuropathy). The location of the injury is at the level of the nerve root (radix = "root"). This can result in pain (radicular pain), weakness, numbness, or difficulty controlling specific muscles. (http://www.malacards.org/card/polyradiculopathy)

* Post-Thrombotic Syndrome, also known as postphlebitic syndrome, is related to lymphedema and thrombophilia, and has symptoms including mahler sign An important gene associated with Post-Thrombotic Syndrome is F5 (Coagulation Factor V), and among its related pathways are Validated transcriptional targets of AP1 family members Fra1 and Fra2 and Immune response MIF-mediated glucocorticoid regulation. Affiliated tissues include skin, testes and bone, and related mouse phenotypes are integument and cardiovascular system. A venous insufficiency that is characterized by aching pain, heaviness, swelling, cramps, itching, or tingling in the affected limb and is a chronic complication of deep venous thrombosis. (http://www.malacards.org/card/post_thrombotic_syndrome)

* Presbyopia is related to refractive error and cycloplegia, and has symptoms including aniseikonia An important gene associated with Presbyopia is CRYAA (Crystallin Alpha A). Affiliated tissues include eye, testes and cortex, and related mouse phenotype vision/eye. A condition associated with aging of the eye that results in progressively worsening ability to focus clearly on close objects. Symptoms include a hard time reading small print, having to hold reading material farther away, headaches, and eyestrain. (http://www.malacards.org/card/presbyopia)

* Seborrheic Dermatitis, also known as seborrheic infantile dermatitis, is related to seborrhea-like dermatitis with psoriasiform elements and garret tripp syndrome, and has symptoms including pruritus, greasy hair and other and unspecified skin changes. An important gene associated with Seborrheic Dermatitis is BTD (Biotinidase), and among its related pathways is Innate Lymphoid Cell Differentiation Pathways. The drugs betamethasone benzoate and sulfacetamide have been mentioned in the context of this disorder. Affiliated tissues include skin, ovary and bone. A dermatitis that is an inflammatory skin condition resulting in flaky, white to yellowish scales on oily areas such as the scalp or inside the ear, which is caused due to a combination of an over production of skin oil and irritation from a yeast Malassezia furfur. The symptoms include itching, skin lesions and scales, redness, plaques and hair loss. (http://www.malacards.org/card/seborrheic_dermatitis)

* Skin Conditions, also known as dermatologic disorders, is related to epstein-barr virus hepatitis and crouzon syndrome with acanthosis nigricans, and has symptoms including mucous membrane eruption, exanthema and pruritus. An important gene associated with Skin Conditions is TNF (Tumor Necrosis Factor), and among its related pathways are Transcription_NF-kB signaling pathway and Cytokines and Inflammatory Response. The drugs gotu kola extract and menthol have been mentioned in the context of this disorder. Affiliated tissues include skin, breast and testes. Many conditions affect the human integumentary system—the organ system covering the entire surface of the body and composed of skin, hair, nails, and related muscle and glands. The major function of this system is as a barrier against the external environment. (

http://www.malacards.org/card/skin_conditions)

* Skin Disease, also known as skin diseases, genetic, is related to dyskeratosis congenita and neurotic excoriation, and has symptoms including mucous membrane eruption, exanthema and pruritus. An important gene associated with Skin Disease is COL17A1 (Collagen Type XVII Alpha 1 Chain), and among its related pathways are Alpha6-Beta4 Integrin Signaling Pathway and Cytoskeleton remodeling Neurofilaments. The drugs gotu kola extract and menthol have been mentioned in the context of this disorder. Affiliated tissues include skin, skin and breast, and related mouse phenotypes are craniofacial and integument. An integumentary system disease that is located in skin. (http://www.malacards.org/card/skin_disease)

* Wrinkles is related to macroepiphyseal dysplasia with osteoporosis, wrinkled skin, and aged appearance and wrinkly skin syndrome. An important gene associated with Wrinkles is ALDH18A1 (Aldehyde Dehydrogenase 18 Family Member A1), and among its related pathways are Signaling events mediated by TCPTP and Neural Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include skin, eye and bone. A wrinkle is a fold, ridge or crease in the skin or on fabric. Skin wrinkles typically appear as a result of aging processes such as glycation, habitual sleeping positions, loss of body mass, or temporarily, as the result of prolonged immersion in water. Age wrinkling in the skin is promoted by habitual facial expressions, aging, sun damage, smoking, poor hydration, and various other factors. (http://www.malacards.org/card/wrinkles)

1.3.2.2 RT-MB-27

https://archive.org/details/Resonant_Therapy-Molecular_Biology_27

Genetic Superpathways-Hypoxia, Genetic Superpathways-Lung Disease, Genetic Superpathways-Multiple System Atrophy, Genetic Superpathways-Muscle Hypertrophy, Genetic Superpathways-Nasal Cavity, Genetics-Back Pain, Genetics-Blood Protein Disease, Genetics-Bone Fracture, Genetics-Capillary Disease, Genetics-Dermatomycosis, Genetics-Dermatophytosis, Genetics-Eyelid Disease, Genetics-Femoral Neuropathy, Genetics-Hypersensitivity Vasculitis, Genetics-Median Neuropathy, Genetics-Miliaria Rubra, Genetics-Muscle Disorders, Genetics-Muscle Tissue Diseases, Genetics-Osteoporotic Fracture, Genetics-Peroneal Neuropathy, Genetics-Plexopathy, Genetics-Scoliosis, Genetics-Scoliosis Idiopathic, Genetics-Skin Atrophy, Genetics-Skin Tag, Genetics Spinal Disease, Genetics-Synovitis, Genetics-Tibial Neuropathy, Genetics-Tick Infestation, Genetics-Tick Paralysis

* Back Pain is related to spondylolisthesis and osteonecrosis. An important gene associated with Back Pain is THBS2 (Thrombospondin 2), and among its related pathways are Matrix Metalloproteinases and Protein digestion and absorption. Affiliated

tissues include spinal cord, bone and testes, and related mouse phenotype limbs/digits/tail. Acute or short-term low back pain generally lasts from a few days to a few weeks.
(http://www.malacards.org/card/back_pain)

* Blood Protein Disease, also known as blood protein disorders, is related to myiasis and marek disease. An important gene associated with Blood Protein Disease is SERPINC1 (Serpin Family C Member 1), and among its related pathways are Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs) and Syndecan-4-mediated signaling events. Affiliated tissues include bone, kidney and bone marrow, and related mouse phenotypes are liver/biliary system and cardiovascular system. Blood proteins, also termed plasma proteins or serum proteins, are proteins present in blood plasma. They serve many different functions, including transport of lipids, hormones, vitamins and minerals in the circulatory system and the regulation of acellular activity and functioning of the immune system. Other blood proteins act as enzymes, complement components, protease inhibitors or kinin precursors.
(http://www.malacards.org/card/blood_protein_disease)

* Bone Fracture is related to xanthomatosis and brain injury. An important gene associated with Bone Fracture is BGLAP (Bone Gamma-Carboxyglutamate Protein), and among its related pathways are Cytoskeleton remodeling_RalB regulation pathway and PI3K-Akt signaling pathway. Affiliated tissues include bone, breast and prostate, and related mouse phenotypes are muscle and cardiovascular system. A medical condition in which there is a damage in the continuity of the bone.
(http://www.malacards.org/card/bone_fracture)

* Capillary Disease, also known as disease of capillaries, is related to subacute lymphocytic thyroiditis and melanoacanthoma, and has symptoms including cardiovascular symptoms and vascular pain. An important gene associated with Capillary Disease is IL2 (Interleukin 2), and among its related pathways are IL-15 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Cytokines and Inflammatory Response. Affiliated tissues include the capillaries, heart and testes, and related mouse phenotypes are homeostasis/metabolism and immune system. A vascular disease that is located in the capillaries.
(http://www.malacards.org/card/capillary_disease)

* Dermatomycosis, also known as dermatomycoses, is related to superficial mycosis and lobomycosis. An important gene associated with Dermatomycosis is RPS3 (Ribosomal Protein S3), and among its related pathways is Amino sugar and nucleotide sugar metabolism. The drug povidone has been mentioned in the context of this disorder. Affiliated tissues include skin or of its appendages, skin and testes, and related mouse phenotype Increased shRNA abundance (Z-score > 2). A cutaneous mycosis that results in fungal infection located in skin or of its appendages, has material basis in Ascomycota fungi other than the dermatophytes.
(http://www.malacards.org/card/dermatomycosis)

* Dermatophytosis, also known as tinea, is related to deep dermatophytosis and tinea corporis, and has symptoms including exanthema and pruritus. An important gene associated with Dermatophytosis is CARD9 (Caspase Recruitment Domain Family Member 9), and among its related pathways are Cytokines and Inflammatory Response and NF-kappaB Signaling. Affiliated tissues include scalp, glabrous skin and nail. A cutaneous mycosis that results in fungal infection located in scalp, located in glabrous skin, or located in nail, has material basis in Ascomycota fungi that belong to a group called dermatophytes, which have the ability to utilize keratin as a nutrient source.
(http://www.malacards.org/card/dermatophytosis)

* Eyelid Disease, also known as eyelid diseases, is related to blepharochalasis and blepharitis, and has symptoms including pathergy reaction, glassy eye and eyelid skin dryness. An important gene associated with Eyelid Disease is FOXL2 (Forkhead Box L2). Affiliated tissues include the eyelid, eye and skin. An adnexa disease that is located in the eyelid.
(http://www.malacards.org/card/eyelid_disease)

* Femoral Neuropathy, also known as femoral nerve dysfunction, is related to neuropathy and glandular tularemia, and has symptoms including femoral neuralgia An important gene associated with Femoral Neuropathy is VLDLR (Very Low Density Lipoprotein Receptor), and among its related pathways is Platelet Aggregation Inhibitor Pathway, Pharmacodynamics. Affiliated tissues include skin, bone and brain. A mononeuropathy that is characterized by a loss of movement or sensation in parts of the legs due to damage to the femoral nerve.
(http://www.malacards.org/card/femoral_neuropathy)

* Hypersensitivity Vasculitis, also known as cutaneous small vessel vasculitis, is related to systemic lupus erythematosus and allergic cutaneous vasculitis, and has symptoms including cutis marmorata, urticaria and subcutaneous hemorrhage. An important gene associated with Hypersensitivity Vasculitis is CD79A (CD79a Molecule), and among its related pathways are Immune response Lectin induced complement pathway and Creation of C4 and C2 activators. Affiliated tissues include skin, neutrophil and testes, and related mouse phenotype immune system. An inflammation of small blood vessels (usually post-capillary venules in the dermis), characterized by palpable purpura.
(http://www.malacards.org/card/hypersensitivity_vasculitis)

* Hypoxia is related to methemoglobinemia and renal cell carcinoma, and has symptoms including anoxemia, cachexia and cyanosis. An important gene associated with Hypoxia is HIF1A (Hypoxia Inducible Factor 1 Alpha Subunit), and among its related pathways are Transcription Ligand-dependent activation of the ESR1/SP pathway and Notch-mediated HES/HEY network. Affiliated tissues include endothelial, lung and brain, and related mouse phenotypes are liver/biliary system and endocrine/exocrine gland. Hypoxia is a pathological condition in which the body as a whole (generalized hypoxia) or region of the body (tissue hypoxia) is deprived of adequate oxygen supply. Hypoxia contributes significantly to the pathophysiology of

major categories of human disease, including myocardial and cerebral ischemia, cancer, pulmonary hypertension, congenital heart disease and chronic obstructive pulmonary disease.
(http://www.malacards.org/card/hypoxia)

* Lung Disease, also known as lung diseases, is related to pulmonary hypertension and middle lobe syndrome, and has symptoms including coughing, coughing and dyspnea. An important gene associated with Lung Disease is SFTPC (Surfactant Protein C), and among its related pathways are RXR and RAR heterodimerization with other nuclear receptor and NF-kappa B signaling pathway. Affiliated tissues include lung, testes and heart, and related mouse phenotypes are neoplasm and hematopoietic system. A lower respiratory tract disease in which the function of the lungs is adversely affected by narrowing or blockage of the airways resulting in poor air flow, a loss of elasticity in the lungs that produces a decrease in the total volume of air that the lungs are able to hold, and clotting, scarring, or inflammation of the blood vessels that affect the ability of the lungs to take up oxygen and to release carbon dioxide.
(http://www.malacards.org/card/lung_disease)

* Median Neuropathy is related to carpal tunnel syndrome, familial and neuropathy, and has symptoms including median nerve neuralgia An important gene associated with Median Neuropathy is LMNA (Lamin A/C). Affiliated tissues include breast, skin and testes.
(http://www.malacards.org/card/median_neuropathy)

* Miliaria Rubra, also known as miliaria crystallina, is related to anhidrosis and miliaria, and has symptoms including exanthema, night sweats and cold sweat. An important gene associated with Miliaria Rubra is TSPAN7 (Tetraspanin 7). Affiliated tissues include skin and eye, and related mouse phenotype integument. A common ailment in hot and humid conditions, such as in the tropics and during the summer season.
(http://www.malacards.org/card/miliaria_rubra)

* Multiple System Atrophy, also known as shy-drager syndrome, is related to essential tremor and pick disease, and has symptoms including cognitive impairment, urinary urgency and urinary incontinence. An important gene associated with Multiple System Atrophy is COQ2 (Coenzyme Q2, Polyprenyltransferase), and among its related pathways are Biogenic Amine Synthesis and Monoamine Transport. Affiliated tissues include brain, testes and bone, and related mouse phenotypes are taste/olfaction and no phenotypic analysis. A progressive neurodegenerative disorder characterized by symptoms of autonomic nervous system failure such as fainting spells and bladder control problems, combined with motor control symptoms such as tremor, rigidity, and loss of muscle coordination. MSA affects both men and women primarily in their 50s.
(http://www.malacards.org/card/multiple_system_atrophy)

* Muscle Disorders, also known as myopathy, is related to myopathy, vacuolar, with casq1 aggregates and miyoshi muscular dystrophy 1, and has symptoms including back pain, dystonia and muscle cramp. An important gene associated with Muscle Disorders

is RYR1 (Ryanodine Receptor 1), and among its related pathways are Smooth Muscle Contraction and ECM-receptor interaction. Affiliated tissues include heart, brain and skeletal muscle, and related mouse phenotype muscle.
(http://www.malacards.org/card/muscle_disorders)

* Muscle Hypertrophy, also known as hypertrophy, is related to myostatin-related muscle hypertrophy and adenoid hypertrophy, and has symptoms including skeletal muscle hypertrophy, cachexia and cyanosis. An important gene associated with Muscle Hypertrophy is MSTN (Myostatin), and among its related pathways are LKB1 signaling events and EGFR Transactivation by Gastrin. Affiliated tissues include prostate, heart and skeletal muscle, and related mouse phenotypes are Decreased viability with paclitaxel and adipose tissue. Muscle hypertrophy involves an increase in size of skeletal muscle through a growth in size of its component cells.
(http://www.malacards.org/card/muscle_hypertrophy)

* Muscle Tissue Diseases is related to myotonia congenita, dominant and cerebellar agenesis. An important gene associated with Muscle Tissue Disease is DMD (Dystrophin), and among its related pathways are Muscular Dystrophies and Dystrophin-Glycoprotein Complex and Non-integrin membrane-ECM interactions. Affiliated tissues include heart, brain and skeletal muscle, and related mouse phenotypes are no phenotypic analysis and cellular.
(http://www.malacards.org/card/muscle_tissue_disease)

* Nasal Cavity Disease, also known as disorder of nasal cavity, is related to cytoplasmic body myopathy and chronic pulmonary heart disease, and has symptoms including purulent rhinitis An important gene associated with Nasal Cavity Disease is RNASE3 (Ribonuclease A Family Member 3), and among its related pathways are IL-9 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Hematopoietic cell lineage. Affiliated tissues include heart, bone and lung, and related mouse phenotypes are Increased transferrin (TF) endocytosis and digestive/alimentary.
(http://www.malacards.org/card/nasal_cavity_disease)

* Osteoporotic Fracture, also known as osteoporotic fractures, is related to bone mineral density qtl18, osteoporosis and osteoporosis. An important gene associated with Osteoporotic Fracture is COL1A1 (Collagen Type I Alpha 1 Chain). Affiliated tissues include bone, bone marrow and prostate.
(http://www.malacards.org/card/osteoporotic_fracture)

* Peroneal Neuropathy, also known as peroneal neuropathies, is related to neuropathy and hereditary orotic aciduria without megaloblastic anaemia. An important gene associated with Peroneal Neuropathy is LITAF (Lipopolysaccharide Induced TNF Factor), and among its related pathways are Dendritic Cells Developmental Lineage Pathway and Hematopoietic cell lineage. Affiliated tissues include endothelial, liver and bone.
(http://www.malacards.org/card/peroneal_neuropathy)

* Plexopathy is related to radiation induced brachial plexopathy and sacral plexopathy. An important gene associated with Plexopathy is PMP22 (Peripheral Myelin Protein 22), and among its related pathways are SIDS Susceptibility Pathways and Neuroscience. Affiliated tissues include bone, myeloid and lung, and related mouse phenotypes are muscle and behavior/neurological. A disorder affecting a network of nerves, blood vessels, or lymph vessels.
(http://www.malacards.org/card/plexopathy)

* Scoliosis is related to osteogenesis imperfecta, type iv and gaze palsy, horizontal, with progressive scoliosis. An important gene associated with Scoliosis is ROBO3 (Roundabout Guidance Receptor 3), and among its related pathways are VEGFR3 signaling in lymphatic endothelium and Cell adhesion_ECM remodeling. Affiliated tissues include bone, testes and skin, and related mouse phenotypes are respiratory system and craniofacial. A bone structure disease characterized by an appreciable lateral deviation in the normally straight vertical line of the spine.
(http://www.malacards.org/card/scoliosis)

* Scoliosis Idiopathic, is related to adolescent idiopathic scoliosis and scoliosis, isolated 3. An important gene associated with Idiopathic Scoliosis is MTNR1B (Melatonin Receptor 1B), and among its related pathways are Apoptosis and survival_Anti-apoptotic action of nuclear ESR1 and ESR2 and Plasma membrane estrogen receptor signaling. Affiliated tissues include bone, brain and testes, and related mouse phenotypes are adipose tissue and limbs/digits/tail. A scoliosis with no known cause, idiopathic scoliosis is the most common spinal deformity in the world. Like other forms of scoliosis, idiopathic scoliosis affects the curvature of the spine.
(http://www.malacards.org/card/idiopathic_scoliosis)

* Skin Atrophy, also known as atrophic condition of skin, is related to atrophoderma vermiculata and atrophoderma of pierini and pasini, and has symptoms including stellate pseudoscar and paroxysmal hematoma of the finger. An important gene associated with Skin Atrophy is FERMT1 (Fermitin Family Member 1), and among its related pathways are Bladder cancer and Cell adhesion_Cell-matrix glycoconjugates. Affiliated tissues include skin, testes and bone, and related mouse phenotypes are muscle and digestive/alimentary.
(http://www.malacards.org/card/skin_atrophy)

* Skin Tag, also known as fibroepithelial polyp of skin, is related to fibroepithelial polyp of the anus and fibroepithelial polyp of urethra, and has symptoms including macule and leser-trÃ©lat sign. An important gene associated with Skin Tag is PTCH1 (Patched 1). Affiliated tissues include skin, testes and t cells, and related mouse phenotypes are embryo and skeleton. A small benign tumor that forms primarily in areas where the skin forms creases, such as the neck, armpit, and groin. They may also occur on the face, usually on the eyelids.
(http://www.malacards.org/card/skin_tag)

* Spinal Disease, also known as spinal disorder, is related to sacral agenesis with

vertebral anomalies and cutaneous leishmaniasis, and has symptoms including back pain, sciatica and other back symptoms. An important gene associated with Spinal Disease is SMN1 (Survival Of Motor Neuron 1, Telomeric), and among its related pathways are Transcription_Role of VDR in regulation of genes involved in osteoporosis and IL6-mediated signaling events. Affiliated tissues include spinal cord, bone and brain. Spinal disease (also known as a dorsopathy) refers to a condition impairing the backbone. These include various diseases of the back or spine, such as kyphosis. Dorsalgia refers to those conditions causing back pain. An example is scoliosis. Some other spinal diseases include Spinal Muscular Atrophy, Ankylosing Spondylitis, Lumbar Spinal Stenosis, Spina Bifida, Spinal tumors, Osteoporosis and Cauda Equina Syndrome.
(http://www.malacards.org/card/spinal_disease)

* Synovitis is related to pigmented villonodular synovitis and villonodular synovitis, and has symptoms including arthralgia and metatarsalgia. An important gene associated with Synovitis is TNF (Tumor Necrosis Factor). Affiliated tissues include synovial membrane, bone and t cells. A connective tissue disease that results in inflammation located in synovial membrane that lines a synovial joint which causes pain and swelling.
(http://www.malacards.org/card/synovitis)

* Tibial Neuropathy, also known as posterior tibial neuropathy, is related to infertility and lactic acidosis. An important gene associated with Tibial Neuropathy is CRYGB (Crystallin Gamma B). Affiliated tissues include endothelial and skin, and related mouse phenotype hearing/vestibular/ear.
(http://www.malacards.org/card/tibial_neuropathy)

* Tick Infestation, also known as tick infestations, is related to tick paralysis and spotted fever. An important gene associated with Tick Infestation is ITGA11 (Integrin Subunit Alpha 11), and among its related pathways is Folate biosynthesis. Affiliated tissues include testes, salivary gland and skin, and related mouse phenotype Decreased focal adhesion (FA) area, decreased FA length, decreased FA mean intensity, increased number of small and round FAs, increased FA abundance. A parasitic ectoparasitic infectious disease that involves parasitic infestation of blood feeding ticks of the families Ixodidae and Argasidae on animals and humans. Ticks are vectors of a number diseases, including Lyme disease, Q fever, Colorado tick fever, tularemia, tick-borne relapsing fever, babesiosis, ehrlichiosis and tick-borne meningoencephalitis, as well as anaplasmosis in cattle and canine jaundice.
(http://www.malacards.org/card/tick_infestation)

* Tick Paralysis is related to poliomyelitis and gonococcal endophthalmia. An important gene associated with Tick Paralysis is TNNI3 (Troponin I3, Cardiac Type). Affiliated tissues include salivary gland, testes and lung. A tick infestation that is characterized by an acute, ascending, flaccid motor paralysis, which is caused by the introduction of a neurotoxin into humans during attachment and feeding by the females of several tick species such as Dermacentor andersoni, Dermacentor variabilis, Amblyomma americanum, Amblyomma maculatum, Ixodes scapularis, Ixodes pacificus, Ixodes

holocyclus, Rhipicephalus sanguineus and Otobius megnini. The symptoms include local inflammation, edema and hemorrhage.
(http://www.malacards.org/card/tick_paralysis)

1.3.2.3 RT-MB-28

https://archive.org/details/Resonant_Therapy-Molecular_Biology_28

Genetic Superpathways-Alzheimer Disease; Genetic Superpathways-Amnestic Disorder; Genetic-Superpathways-Ankylosis; Genetic Superpathways-Connective Tissue Disease; Genetic Superpathways-Chronic Conjunctivitis; Genetic Superpathways-Dementia; Genetic Superpathways-Neuroma; Genetic Superpathways-Osteoarthritis; Genetic Superpathways-Syncope; Genetics-Arthropathy; Genetics-Chondromalacia Patella; Genetics-Delayed Sleep Phase; Genetics-Fainting; Genetics-Hydrarthrosis; Genetics-Intermittent Hydrarthrosis; Genetics-Mental Health Disease; Genetics-Miliaria; Genetics-Nasopharyngeal Disease; Genetics-Neuromuscular Disease; Genetics-Parkinson Disease 1; Genetics-Patellofemoral Pain Syndrome; Genetics-Plica; Genetics-Radial Neuropathy; Genetics-Reactive Arthritis; Genetics-Sciatic Nerve Lesion; Genetics-Sciatic Neuropathy; Genetics-Shoulder Impingement; Genetics-Tendinitis; Genetics-Thoracic Outlet; Genetics-Ulnar Neuropathy;

* Alzheimer Disease, also known as alzheimer's disease, is related to alzheimer disease-4 and parkinson disease 1, and has symptoms including sleeplessness, sleeplessness and equilibration disorder. An important gene associated with Alzheimer Disease is APP (Amyloid Beta Precursor Protein), and among its related pathways are Neuroscience and Alzheimers Disease Pathway. The drugs dl-alpha tocopheryl acetate and tocopherol acetate have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and cortex, and related mouse phenotypes are mortality/aging and immune system. A neurodegenerative disorder characterized by progressive dementia, loss of cognitive abilities, and deposition of fibrillar amyloid proteins as intraneuronal neurofibrillary tangles, extracellular amyloid plaques and vascular amyloid deposits.
(http://www.malacards.org/card/alzheimer_disease)

* Amnestic Disorder, also known as amnesia, is related to transient global amnesia and retrograde amnesia, and has symptoms including other amnesia, memory loss and forgetful. An important gene associated with Amnestic Disorder is CHAT (Choline O-Acetyltransferase), and among its related pathways are Biogenic Amine Synthesis and Acetylcholine Synthesis. Affiliated tissues include brain, testes and breast, and related mouse phenotypes are Increased transferrin (TF) endocytosis and adipose tissue. A cognitive disorder where the memory is disturbed or lost and involves the loss of memories previously established, loss of the ability to create new memories, or loss of the ability to learn new information.

(http://www.malacards.org/card/amnestic_disorder)

* Ankylosis is related to fibrodysplasia ossificans progressiva and auriculocondylar syndrome 1, and has symptoms including joint symptom, hyperextension and joint stiffness. An important gene associated with Ankylosis is ANKH (ANKH Inorganic Pyrophosphate Transport Regulator), and among its related pathways are Cardiomyocyte Differentiation through BMP Receptors and Selective Serotonin Reuptake Inhibitor Pathway, Pharmacodynamics. Affiliated tissues include bone, endothelial and t cells, and related mouse phenotypes are Decreased IL-13 protein expression and digestive/alimentary. An arthropathy where there is a stiffness of a joint, the result of injury or disease.
(http://www.malacards.org/card/ankylosis)

* Arthropathy also known as joint ankylosis of the pelvic region and thigh is related to rheumatoid arthritis and camptodactyly-arthropathy-coxa vara-pericarditis syndrome and has symptoms including arthralgia back pain and metatarsalgia. An important gene associated with Arthropathy is PRG4 (Proteoglycan 4) and among its related pathways are Osteoclast Signaling and Osteoblast Signaling. Affiliated tissues include joint bone and testes and related mouse phenotypes are muscle and liver/biliary system. A bone inflammation disease that is located in joint.
(http://www.malacards.org/card/arthropathy)

* Patella, Chondromalacia of, also known as chondromalacia patellae, is related to chondromalacia and brain stem angioblastoma, and has symptoms including abnormality of the patella An important gene associated with Patella, Chondromalacia of is EGR3 (Early Growth Response 3), and among its related pathways are ECM-receptor interaction and ECM proteoglycans. Affiliated tissues include bone, and related mouse phenotypes are Increased Nanog expression and Increased gamma-H2AX phosphorylation. An inflammation of the underside of the patella and softening of the cartilage.
(http://www.malacards.org/card/patella_chondromalacia_of)

* Chronic Conjunctivitis, also known as chronic conjunctivitis, unspecified, is related to asthma and simple chronic conjunctivitis. An important gene associated with Chronic Conjunctivitis is FCER2 (Fc Fragment Of IgE Receptor II), and among its related pathways are Inflammatory Response Pathway and IL12 signaling mediated by STAT4. Affiliated tissues include eye, thyroid and bone, and related mouse phenotypes are digestive/alimentary and hematopoietic system.
(http://www.malacards.org/card/chronic_conjunctivitis)

* Connective Tissue Disease, also known as connective tissue diseases, is related to lipodermatosclerosis and rheumatoid arthritis, and has symptoms including sciatica, muscle cramp and back pain. An important gene associated with Connective Tissue Disease is FBN1 (Fibrillin 1), and among its related pathways are Legionellosis and Pertussis. Affiliated tissues include bone, skin and lung, and related mouse phenotypes are renal/urinary system and embryo. A musculoskeletal system disease that affects

tissues such as skin, tendons, and cartilage. The recording plays only the pathways, other related genes are not included.
(http://www.malacards.org/card/connective_tissue_disease)

* Delayed Sleep Phase Syndrome, also known as delayed sleep phase syndrome, susceptibility to, is related to dsp-related ectodermal dysplasia/skin fragility syndrome and arrhythmogenic right ventricular dysplasia 1, and has symptoms including sleep disturbances and disruption of 24 hour sleep wake cycle, unspecified. An important gene associated with Delayed Sleep Phase Syndrome is AANAT (Aralkylamine N-Acetyltransferase), and among its related pathways are Circadian rhythm pathway and Metabolic States and Circadian Oscillators. Affiliated tissues include liver, testes and brain. A circadian rhythm sleep disorder characterized by sleep-onset insomnia and difficulty in awakening at the desired time. Patients with DSPS have chronic difficulty in adjusting their sleep-onset and wake-up times to occupational, school, and social activities.
(http://www.malacards.org/card/delayed_sleep_phase_syndrome)

* Dementia, also known as presenile dementia, is related to dementia, frontotemporal and mast syndrome, and has symptoms including back pain, headache and pain. An important gene associated with Dementia is MAPT (Microtubule Associated Protein Tau), and among its related pathways are Notch Pathway and p75(NTR)-mediated signaling. The drugs prochlorperazine maleate and prochlorperazine have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and cortex, and related mouse phenotypes are limbs/digits/tail and muscle. A cognitive disorder resulting from a loss of brain function affecting memory, thinking, language, judgement and behavior.
(http://www.malacards.org/card/dementia)

* Fainting is related to myocardial infarction and syncope. An important gene associated with Fainting is KCNH2 (Potassium Voltage-Gated Channel Subfamily H Member 2), and among its related pathways are Formation of Fibrin Clot (Clotting Cascade) and Complement and coagulation cascades. Affiliated tissues include brain, skin and heart, and related mouse phenotype homeostasis/metabolism. A temporary loss of consciousness.
(http://www.malacards.org/card/fainting)

* Hydrarthrosis is related to intermittent hydrarthrosis and gestational diabetes, and has symptoms including arthralgia, metatarsalgia and joint swelling. An important gene associated with Hydrarthrosis is MEFV (MEFV, Pyrin Innate Immunity Regulator), and among its related pathways are Aquaporin-mediated transport and SIDS Susceptibility Pathways. Affiliated tissues include bone, and related mouse phenotypes are hematopoietic system and homeostasis/metabolism. An effusion of watery liquid into the cavity of a joint.
(http://www.malacards.org/card/hydrarthrosis)

* Intermittent Hydrarthrosis, also known as intermittent joint effusion, is related to

hydrarthrosis and synovitis. An important gene associated with Intermittent Hydrarthrosis is MEFV (MEFV, Pyrin Innate Immunity Regulator). Affiliated tissues include bone. a chronic condition of unknown cause characterized by recurring, temporary episodes of fluid accumulation in the knee. While the knee is mainly involved, occasionally other joints such as the elbow or ankle can additionally be affected.
(http://www.malacards.org/card/intermittent_hydrarthrosis)

* Disease of Mental Health, also known as mental disorders, is related to schizophrenia and sexual disorder, and has symptoms including symptoms, sluggishness and shaking inside. An important gene associated with Disease of Mental Health is IER3IP1 (Immediate Early Response 3 Interacting Protein 1), and among its related pathways are Neurotransmitter Clearance In The Synaptic Cleft and GPCRs, Other. Affiliated tissues include brain, testes and heart, and related mouse phenotypes are muscle and digestive/alimentary. A disease that involves a psychological or behavioral pattern generally associated with subjective distress or disability that occurs in an individual, and which are not a part of normal development or culture.
(http://www.malacards.org/card/disease_of_mental_health)

* Miliaria is related to anhidrosis and miliaria rubra, and has symptoms including exanthema, night sweats and cold sweat. An important gene associated with Miliaria is TSPAN7 (Tetraspanin 7), and among its related pathways are Malaria and Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include skin and eye, and related mouse phenotypes are digestive/alimentary and respiratory system. Also called heat rash or prickly heat.
(http://www.malacards.org/card/miliaria)

* Nasopharyngeal Disease, also known as nasopharyngeal diseases, is related to nasopharyngitis and allergic hypersensitivity disease, and has symptoms including myoclonus, palatal An important gene associated with Nasopharyngeal Disease is PSMB9 (Proteasome Subunit Beta 9). Affiliated tissues include lung, testes and colon.
(http://www.malacards.org/card/nasopharyngeal_disease)

* Neuroma is related to multiple mucosal neuroma and multiple endocrine neoplasia iib. An important gene associated with Neuroma is ANK3 (Ankyrin 3), and among its related pathways are Spinal Cord Injury and Angiogenesis (CST). Affiliated tissues include brain, bone and skin, and related mouse phenotypes are Increased proliferation and muscle. A nervous system benign neoplasm that is characterized as a nerve tissue tumor.
(http://www.malacards.org/card/neuroma)

* Neuromuscular Disease, also known as neuromuscular diseases, is related to hypertonia and central core disease, and has symptoms including athetosis, back pain and headache. An important gene associated with Neuromuscular Disease is TRPV4 (Transient Receptor Potential Cation Channel Subfamily V Member 4), and among its related pathways are Muscular Dystrophies and Dystrophin-Glycoprotein Complex and Agrin Interactions at Neuromuscular Junction. Affiliated tissues include spinal cord,

bone and testes, and related mouse phenotypes are limbs/digits/tail and hearing/vestibular/ear. A neuropathy that affect the nerves that control the voluntary muscles.
(http://www.malacards.org/card/neuromuscular_disease)

* Osteoarthritis, also known as degenerative joint disease, is related to rheumatoid arthritis and spondylolisthesis, and has symptoms including arthralgia, back pain and metatarsalgia. An important gene associated with Osteoarthritis is COL2A1 (Collagen Type II Alpha 1 Chain), and among its related pathways are IL-9 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Syndecan-1-mediated signaling events. The drugs chondroitin sulfates and diclofenac have been mentioned in the context of this disorder. Affiliated tissues include joint, bone and bone marrow, and related mouse phenotypes are limbs/digits/tail and immune system. An arthritis that has material basis in worn out cartilage located in joint.
(http://www.malacards.org/card/osteoarthritis)

* Parkinson Disease 1, also known as autosomal dominant parkinson disease 1, is related to kufor-rakeb syndrome and parkinson disease, late-onset, and has symptoms including urinary urgency, dysarthria and mental deterioration. An important gene associated with Parkinson Disease 1 is SNCA (Synuclein Alpha), and among its related pathways are Proteolysis_Putative ubiquitin pathway and Alpha-synuclein signaling. Affiliated tissues include brain, subthalamic nucleus and cortex, and related mouse phenotypes are taste/olfaction and cellular. A complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability. Additional features are characteristic postural abnormalities, dysautonomia, dystonic cramps, and dementia.
(http://www.malacards.org/card/parkinson_disease_1)

* Patellofemoral Pain Syndrome is related to glandular tularemia and hypotropia, and has symptoms including arthralgia, metatarsalgia and joint laxity. An important gene associated with Patellofemoral Pain Syndrome is PRF1 (Perforin 1), and among its related pathways are Estrogen signaling pathway and Downstream signaling in naive CD8+ T cells. Affiliated tissues include bone and testes, and related mouse phenotypes are hematopoietic system and immune system. A syndrome characterized by knee pain ranging from severe to mild discomfort seemingly originating from the contact of the posterior surface of the patella (back of the kneecap) with the femur (thigh bone).
(http://www.malacards.org/card/patellofemoral_pain_syndrome)

* Plica Syndrome is related to acrorenal syndrome and malignant type ab thymoma, and has symptoms including arthralgia, joint swelling and joint stiffness. An important gene associated with Plica Syndrome is ELN (Elastin), and among its related pathways is Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include bone and testes. A condition which occurs when a plica (an extension of the protective synovial capsule of the knee) becomes irritated, enlarged, or inflamed.
(http://www.malacards.org/card/plica_syndrome)

* Radial Neuropathy is related to radial nerve lesion and neuropathy. An important gene associated with Radial Neuropathy is PC (Pyruvate Carboxylase), and among its related pathways are Fc gamma R-mediated phagocytosis and Neural Stem Cell Differentiation Pathways and Lineage-specific Markers. Related mouse phenotype Decreased shRNA abundance (Z-score < -2). A type of mononeuropathy which results from acute trauma to the radial nerve that extends the length of the arm.
(http://www.malacards.org/card/radial_neuropathy)

* Reactive Arthritis, also known as reiter syndrome, is related to hepatitis b and systemic lupus erythematosus, and has symptoms including abnormality of the oral cavity, abnormality of the urethra and hyperkeratosis. An important gene associated with Reactive Arthritis is HLA-B (Major Histocompatibility Complex, Class I, B), and among its related pathways are IL-15 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Legionellosis. Affiliated tissues include t cells, heart and endothelial, and related mouse phenotypes are neoplasm and no phenotypic analysis. An arthritis that is an autoimmune disease which develops due to an infection located elsewhere in the body.
(http://www.malacards.org/card/reactive_arthritis)

* Sciatic Nerve Lesion, also known as lesion of sciatic nerve, nos, is related to pseudoainhum and neonatal respiratory failure. An important gene associated with Lesion of Sciatic Nerve is NGF (Nerve Growth Factor), and among its related pathways are Guidance Cues and Growth Cone Motility and BDNF signaling pathway. Affiliated tissues include testes, and related mouse phenotypes are muscle and cardiovascular system.
(http://www.malacards.org/card/lesion_of_sciatic_nerve)

* Sciatic Neuropathy is related to neuropathy and goiter, and has symptoms including sciatica An important gene associated with Sciatic Neuropathy is PMP22 (Peripheral Myelin Protein 22), and among its related pathways are Trk receptor signaling mediated by PI3K and PLC-gamma and Inflammatory Response Pathway. Affiliated tissues include spinal cord, thalamus and b cells, and related mouse phenotypes are muscle and no phenotypic analysis. Compression of or damage to the sciatic nerve.
(http://www.malacards.org/card/sciatic_neuropathy)

* Shoulder Impingement Syndrome, also known as impingement syndrome of shoulder region, is related to necrotizing ulcerative gingivitis and neurilemmoma of the fifth cranial nerve, and has symptoms including arthralgia and metatarsalgia. An important gene associated with Shoulder Impingement Syndrome is SKIL (SKI Like Proto-Oncogene), and among its related pathways are Osteoclast Signaling and G-protein signaling_H-RAS regulation pathway. Affiliated tissues include testes, bone and spinal cord, and related mouse phenotypes are Decreased viability and liver/biliary system.
(http://www.malacards.org/card/shoulder_impingement_syndrome)

* Syncope is related to jervell and lange-nielsen syndrome and atrial fibrillation, familial,

3. An important gene associated with Syncope is SLC6A2 (Solute Carrier Family 6 Member 2), and among its related pathways are Antiarrhythmic Pathway, Pharmacodynamics and SIDS Susceptibility Pathways. Affiliated tissues include testes, brain and heart, and related mouse phenotype muscle. A temporary loss of consciousness due to the sudden decline of blood flow to the brain. Syncope is commonly called fainting or passing out.
(http://www.malacards.org/card/syncope)

* Tendinitis, also known as tendinopathy, is related to xanthomatosis and calcific tendinitis, and has symptoms including back pain, muscle cramp and sciatica. An important gene associated with Tendinitis is G6PC (Glucose-6-Phosphatase Catalytic Subunit), and among its related pathways are Osteoclast Signaling and ECM proteoglycans. Affiliated tissues include bone, testes and hypothalamus. A tendon injury that involves larger-scale acute injuries accompanied by inflammation.
(http://www.malacards.org/card/tendinitis)

* Thoracic Outlet Syndrome, also known as tos, is related to neurogenic thoracic outlet syndrome and venous thoracic outlet syndrome, and has symptoms including paresthesia, abnormality of the ribs and edema. An important gene associated with Thoracic Outlet Syndrome is HHAT (Hedgehog Acyltransferase). Affiliated tissues include testes, lung and ovary, and related mouse phenotypes are Increased number of mitotic cells and Increased number of cells in monopolar arrest with EMD534085 (a Kinesin-5 inhibitor). Thoracic outlet syndrome refers to the many signs and symptoms caused from compression of the group of nerves and blood vessels in the area just above the first rib and behind the clavicle.
(http://www.malacards.org/card/thoracic_outlet_syndrome)

* Ulnar Neuropathy, also known as ulnar neuropathies, is related to neuropathy and chronic salpingitis. An important gene associated with Ulnar Neuropathy is ARHGEF10 (Rho Guanine Nucleotide Exchange Factor 10), and among its related pathways are Pyruvate metabolism and Citric Acid (TCA) cycle and Signaling by Retinoic Acid. Affiliated tissues include testes, kidney and spinal cord.
(http://www.malacards.org/card/ulnar_neuropathy)

1.3.2.4 RT-MB-29

https://archive.org/details/Resonant_Therapy-Molecular_Biology_29

Genetic Superpathways-Acquired Metabolic Disease; Genetic Superpathways-Hypercholesterolemia; Genetic Superpathways-Immune System Disease; Genetic Superpathways-Iron Deficiency Anemia; Genetic Superpathways-Nervous System Disease; Genetic Superpathways-Nicotine Dependence; Genetic Superpathways-Nose Disease; Genetic Superpathways-Parkinson Disease Late Onset; Genetics-Auditory System Disease; Genetics-Autonomic Neuropathy; Genetics-Basal Ganglia Disease; Genetics-Blepharochalasis; Genetics-Cartilage Disease; Genetics-Collagen Disease;

Genetics-Cutis Laxa; Genetics-Eye Disease; Genetics-Hair Disease; Genetics-Hypothalamic Disease; Genetics-Keratosis; Genetics-Mitochondrial Complex I Deficiency; Genetics-Motor Peripheral Neuropathy; Genetics-Muscular Atrophy; Genetics-Peripheral Vertigo; Genetics-Pigmentation Disease; Genetics-Reflex Sympathetic Dystrophy; Genetics-Salivary Gland Disease; Genetics-Sebaceous Gland Disease; Genetics-Sensory Peripheral Neuropathy; Genetics-Sweat Gland Disease; Genetics-Tremor

* Acquired Metabolic Disease is related to hypotelorism cleft palate hypospadias and scleredema adultorum. An important gene associated with Acquired Metabolic Disease is INS (Insulin), and among its related pathways are Signaling events mediated by PTP1B and Aldosterone-regulated sodium reabsorption. Affiliated tissues include bone, liver and heart, and related mouse phenotypes are neoplasm and renal/urinary system. A disease of metabolism that has material basis in enzyme deficiency or accumulation of enzymes or toxins which interfere with normal function due to an endocrine organ disease, organ malfunction, inadequate intake, dietary deficiency, or malabsorption.
(http://www.malacards.org/card/acquired_metabolic_disease)

* Auditory System Disease, also known as ear diseases, is related to deafness, autosomal dominant 3a and deafness, autosomal recessive 4, with enlarged vestibular aqueduct, and has symptoms including diplacusis, bilateral, diplacusis, left ear and diplacusis, right ear. An important gene associated with Auditory System Disease is GJB2 (Gap Junction Protein Beta 2), and among its related pathways is Gap junction trafficking. The drugs sulfacetamide and sulfacetamide sodium have been mentioned in the context of this disorder. Affiliated tissues include brain, eye and testes, and related mouse phenotypes are behavior/neurological and hearing/vestibular/ear.
(http://www.malacards.org/card/auditory_system_disease)

* Autonomic Neuropathy is related to neuropathy, hereditary sensory and autonomic, type v and lupus erythematosus. An important gene associated with Autonomic Neuropathy is NGF (Nerve Growth Factor), and among its related pathways is Activation of TRKA receptors. Affiliated tissues include heart, testes and spinal cord, and related mouse phenotypes are integument and muscle. A form of polyneuropathy that affects the non-voluntary, non-sensory nervous system (i.e., the autonomic nervous system).
(http://www.malacards.org/card/autonomic_neuropathy)

* Basal Ganglia Disease, also known as basal ganglia diseases, is related to biotin-thiamine-responsive basal ganglia disease and dandy-walker malformation with intellectual disability, basal ganglia disease and seizures. An important gene associated with Basal Ganglia Disease is SLC19A3 (Solute Carrier Family 19 Member 3), and among its related pathways is Vitamin digestion and absorption. Affiliated tissues include brain, subthalamic nucleus and testes, and related mouse phenotypes are adipose tissue and immune system. A group of physical dysfunctions that occur when

the group of nuclei in the brain known as the basal ganglia fail to properly suppress unwanted movements or to properly prime upper motor neuron circuits to initiate motor function.
(http://www.malacards.org/card/basal_ganglia_disease)

* Blepharochalasis is related to blepharochalasis and double lip and amyoplasia mandibulofacial dysostosis, and has symptoms including eyelash injury, lacrimal punctum enlarged and eyelid skin dryness. An important gene associated with Blepharochalasis is GSN (Gelsolin), and among its related pathways are Osteopontin-mediated events and Cell adhesion_ECM remodeling. Affiliated tissues include skin, eye and neutrophil, and related mouse phenotypes are homeostasis/metabolism and hematopoietic system. An eyelid disease that is characterized by exacerbations and remissions of eyelid edema, which results in a stretching and subsequent atrophy of the eyelid tissue, leading to the formation of redundant folds over the lid margins.
(http://www.malacards.org/card/blepharochalasis)

* Cartilage Disease, also known as cartilage diseases, is related to congenital short femur and cryptophthalmos, unilateral or bilateral, isolated, and has symptoms including back pain, muscle cramp and sciatica. An important gene associated with Cartilage Disease is COL10A1 (Collagen Type X Alpha 1 Chain), and among its related pathways are ECM proteoglycans and Endochondral Ossification. The drugs chondroitin sulfates and chondroitin sodium have been mentioned in the context of this disorder. Affiliated tissues include bone, skin and bone marrow, and related mouse phenotype immune system.
(http://www.malacards.org/card/cartilage_disease)

* Collagen Disease, also known as collagen diseases, is related to diffuse scleroderma and disseminated eosinophilic collagen disease. An important gene associated with Collagen Disease is COL1A1 (Collagen Type I Alpha 1 Chain), and among its related pathways are Inflammatory Response Pathway and Binding and Uptake of Ligands by Scavenger Receptors. The drugs prednisolone pwdr and prednisone pwdr have been mentioned in the context of this disorder. Affiliated tissues include skin, liver and endothelial, and related mouse phenotypes are cardiovascular system and respiratory system. Diseases associated with defects in collagen, which is a component of the connective tissue.
(http://www.malacards.com/card/collagen_disease)

* Cutis Laxa, also known as generalized elastolysis, is related to cutis laxa, autosomal dominant 2 and cutis laxa, ad, and has symptoms including cutis laxa, patent ductus arteriosus and hernia of the abdominal wall. An important gene associated with Cutis Laxa is FBLN5 (Fibulin 5), and among its related pathways are Arginine and proline metabolism and Amino acid synthesis and interconversion (transamination). Affiliated tissues include skin, heart and lung, and related mouse phenotypes are integument and muscle. A skin disease characterized by skin that is loose, hanging, wrinkled and lacking in elasticity; it can also affect connective tissue in other parts of the body, including the heart, blood vessels, joints, intestines and lungs.

(http://www.malacards.org/card/cutis_laxa)

* Eye Disease, also known as disorder of eye, is related to macular degeneration, age-related, 1 and hypothyroidism, and has symptoms including unspecified visual loss, glassy eye and ocular pain, bilateral. An important gene associated with Eye Disease is CACNA1F (Calcium Voltage-Gated Channel Subunit Alpha1 F), and among its related pathways are African trypanosomiasis and IL-10 Pathway. The drugs prednisone and prednisone pwdr have been mentioned in the context of this disorder. Affiliated tissues include the eye, eye and thyroid, and related mouse phenotypes are pigmentation and hematopoietic system. An eye and adnexa disease that is located in the eye.
(http://www.malacards.org/card/eye_disease)

* Hair Disease, also known as hair diseases, is related to menkes disease and monilethrix, and has symptoms including skin manifestations, pruritus and exanthema. An important gene associated with Hair Disease is KRT86 (Keratin 86), and among its related pathways is Platinum Pathway, Pharmacokinetics/Pharmacodynamics. Affiliated tissues include hair, ovary and skin, and related mouse phenotypes are pigmentation and muscle. Hair diseases are disorders primarily associated with the follicles of the hair.
(http://www.malacards.org/card/hair_disease)

* Hypercholesterolemia, Familial, also known as familial hypercholesterolemia, is related to hypercholesterolemia, familial, autosomal recessive and hyperlipidemia, familial combined, and has symptoms including corneal arcus, xanthelasma and hypercholesterolemia. An important gene associated with Hypercholesterolemia, Familial is LDLR (Low Density Lipoprotein Receptor), and among its related pathways are SREBF and miR33 in cholesterol and lipid homeostasis and Folate Metabolism. The drugs ezetimibe and atorvastatin have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and liver, and related mouse phenotypes are Increased LDL uptake and Decreased free cholesterol. A condition characterized by very high levels of cholesterol in the blood.
(http://www.malacards.org/card/hypercholesterolemia_familial)

* Hypothalamic Disease, also known as hypothalamic diseases, is related to rapid-onset childhood obesity-hypothalamic dysfunction-hypoventilation-autonomic dysregulation syndrome and anophthalmia cleft lip palate hypothalamic disorder. An important gene associated with Hypothalamic Disease is CRH (Corticotropin Releasing Hormone), and among its related pathways are Growth hormone receptor signaling and Corticotropin-releasing hormone. Affiliated tissues include pituitary, brain and testes, and related mouse phenotypes are endocrine/exocrine gland and immune system. A condition in which the hypothalamus is not working properly.
(http://www.malacards.org/card/sensory_peripheral_neuropathy)

* Immune System Disease, also known as immune system and disorders, is related to primary immunodeficiency disease and c3 deficiency, and has symptoms including pathological conditions, signs and symptoms and pathergy reaction. An important gene

associated with Immune System Disease is CCR5 (C-C Motif Chemokine Receptor 5 (Gene/Pseudogene)), and among its related pathways are Defective GALNT12 causes colorectal cancer 1 (CRCS1) and Nef-mediates down modulation of cell surface receptors by recruiting them to clathrin adapters. Affiliated tissues include the immune system, testes and t cells, and related mouse phenotypes are digestive/alimentary and cellular. A disease of anatomical entity that is located in the immune system.
(http://www.malacards.org/card/immune_system_disease)

* Iron Deficiency Anemia is related to atherosclerosis and neuropathy. An important gene associated with Iron Deficiency Anemia is TMPRSS6 (Transmembrane Protease, Serine 6), and among its related pathways are HIF-1-alpha transcription factor network and Ferroptosis. The drugs ferrous sulfate and ferrous sulfate,dried have been mentioned in the context of this disorder. Affiliated tissues include kidney, heart and small intestine, and related mouse phenotypes are hematopoietic system and liver/biliary system. An anemia caused by a lack of iron.
(http://www.malacards.org/card/iron_deficiency_anemia)

* Keratosis, also known as actinic keratosis, is related to keratosis palmoplantaris striata iii and ulerythema ophryogenesis, and has symptoms including exanthema, pruritus and skin manifestations. An important gene associated with Keratosis is MBTPS2 (Membrane Bound Transcription Factor Peptidase, Site 2), and among its related pathways are Central carbon metabolism in cancer and Bladder cancer. The drugs diclofenac potassium and fluorouracil have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and kidney, and related mouse phenotypes are neoplasm and no phenotypic analysis. A growth of keratin on the skin or on mucous membranes.
(http://www.malacards.org/card/keratosis)

* Mitochondrial Complex I Deficiency, also known as nadh:q(1) oxidoreductase deficiency, is related to mitochondrial complex i deficiency due to acad9 deficiency and fatal infantile hypertrophic cardiomyopathy due to mitochondrial complex i deficiency, and has symptoms including ataxia, ataxia and lethargy. An important gene associated with Mitochondrial Complex I Deficiency is NDUFV1 (NADH:Ubiquinone Oxidoreductase Core Subunit V1), and among its related pathways are Metformin Pathway, Pharmacodynamics and GABAergic synapse. Affiliated tissues include liver, skeletal muscle and temporal lobe, and related mouse phenotypes are Decreased shRNA abundance and Decreased shRNA abundance (Z-score < -2). The most common enzymatic defect of the oxidative phosphorylation disorders. It causes a wide range of clinical disorders, ranging from lethal neonatal disease to adult-onset neurodegenerative disorders. Phenotypes include macrocephaly with progressive leukodystrophy, nonspecific encephalopathy, hypertrophic cardiomyopathy, myopathy, liver disease, Leigh syndrome, Leber hereditary optic neuropathy, and some forms of Parkinson disease.
(http://www.malacards.com/card/mitochondrial_complex_i_deficiency)

* Motor Peripheral Neuropathy, also known as peripheral motor neuropathy, is related to

hereditary motor and sensory neuropathy via and charcot-marie-tooth disease, type 2a1, and has symptoms including neurologic symptoms An important gene associated with Motor Peripheral Neuropathy is PMP22 (Peripheral Myelin Protein 22), and among its related pathways is Neural Crest Differentiation. Related mouse phenotypes are muscle and cellular.
(http://www.malacards.org/card/motor_peripheral_neuropathy)

* Muscular Atrophy, also known as muscle wasting, is related to spinal muscular atrophy-4 and spinal muscular atrophy-3, and has symptoms including muscular fasciculation, muscle cramp and spasm. An important gene associated with Muscular Atrophy is SMN1 (Survival Of Motor Neuron 1, Telomeric). Affiliated tissues include skeletal muscle, testes and spinal cord, and related mouse phenotype muscle. A decrease in the mass of the muscle; it can be a partial or complete wasting away of muscle, and is most commonly experienced when persons suffer temporary disabling circumstances.
(http://www.malacards.org/card/muscular_atrophy)

* Nervous System Disease, also known as nervous system diseases, is related to multiple sclerosis, disease progression, modifier of and hypothyroidism, and has symptoms including aphonia, ataxia and athetosis. An important gene associated with Nervous System Disease is MOG (Myelin Oligodendrocyte Glycoprotein), and among its related pathways are Legionellosis and IL-10 Pathway. Affiliated tissues include the central nervous system or, brain and spinal cord, and related mouse phenotypes are muscle and respiratory system. A disease of anatomical entity that is located in the central nervous system or located in the peripheral nervous system.
(http://www.malacards.org/card/nervous_system_disease)

* Nicotine Dependence, Protection Against, also known as nicotine dependence, is related to schizophrenia and cocaine dependence, and has symptoms including hangover from alcohol An important gene associated with Nicotine Dependence, Protection Against is GABBR2 (Gamma-Aminobutyric Acid Type B Receptor Subunit 2), and among its related pathways are Nicotine Activity on Chromaffin Cells and noradrenaline and adrenaline degradation. Affiliated tissues include lung, brain and testes, and related mouse phenotypes are integument and homeostasis/metabolism.
(http://www.malacards.org/card/nicotine_dependence_protection_against)

* Nose Disease, also known as disorder of the nose, is related to marasmus and dahlberg borer newcomer syndrome, and has symptoms including dyspnea and rhinorrhea. An important gene associated with Nose Disease is RNASE3 (Ribonuclease A Family Member 3), and among its related pathways are IL-9 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Calcineurin-regulated NFAT-dependent transcription in lymphocytes. Affiliated tissues include bone, and related mouse phenotypes are Increased transferrin (TF) endocytosis and digestive/alimentary.
(http://www.malacards.org/card/nose_disease)

* Parkinson Disease, Late-Onset, also known as parkinson disease, is related to parkinson disease 1 and parkinson disease 6, early onset, and has symptoms including hallucinations, dysautonomia and urinary urgency. An important gene associated with Parkinson Disease, Late-Onset is GBA (Glucosylceramidase Beta), and among its related pathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Parkinsons Disease Pathway. The drugs biperiden and carbidopa have been mentioned in the context of this disorder. Affiliated tissues include brain, subthalamic nucleus and testes, and related mouse phenotypes are behavior/neurological and homeostasis/metabolism. A complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability. Additional features are characteristic postural abnormalities, dysautonomia, dystonic cramps, and dementia.
(http://www.malacards.org/card/parkinson_disease_late_onset)

* Peripheral Vertigo, also known as vertigo, peripheral, is related to acute infection of pinna and med13l syndrome, and has symptoms including vertigo An important gene associated with Peripheral Vertigo is CRP (C-Reactive Protein), and among its related pathways are Complement and coagulation cascades and Formation of Fibrin Clot (Clotting Cascade). Affiliated tissues include neutrophil, and related mouse phenotypes are homeostasis/metabolism and mortality/aging. A problem with the inner ear, which controls balance.
(http://www.malacards.org/card/peripheral_vertigo)

* Pigmentation Disease, also known as pigmentation disorders, is related to hypomelanosis of ito and dyschromatosis symmetrica hereditaria, and has symptoms including exanthema, pruritus and polydipsia. An important gene associated with Pigmentation Disease is TYR (Tyrosinase), and among its related pathways are Estrogen metabolism and Constitutive Androstane Receptor Pathway. Affiliated tissues include skin, and related mouse phenotypes are limbs/digits/tail and integument. Disturbances of human skin color, either loss or reduction, which may be related to loss of melanocytes or the inability of melanocytes to produce melanin or transport melanosomes correctly.
(http://www.malacards.com/card/pigmentation_disease)

* Reflex Sympathetic Dystrophy, also known as algodystrophy, is related to complex regional pain syndrome and algoneurodystrophy, and has symptoms including back pain, headache and neuralgia. An important gene associated with Reflex Sympathetic Dystrophy is CALCA (Calcitonin Related Polypeptide Alpha), and among its related pathways are Endothelin Pathways and Adipocytokine signaling pathway. The drug ethanol has been mentioned in the context of this disorder. Affiliated tissues include skin, bone and spinal cord. A complex of symptoms that may develop after trauma, disease or "spontaneously" and has obligatory pain and at least three of the four following symptoms: 1. Difference in skin color relative to the other limb. 2. Diffuse edema. 3. Difference in skin temperature relative to the other limb. 4. Limited active range of motion.
(http://www.malacards.org/card/reflex_sympathetic_dystrophy)

* Salivary Gland Disease, also known as salivary gland diseases, is related to igg4-related disease and jaw cancer, and has symptoms including halitosis, oral manifestations and snoring. An important gene associated with Salivary Gland Disease is CDSN (Corneodesmosin), and among its related pathways are Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell and Cell adhesion molecules (CAMs). Affiliated tissues include salivary gland and lymph node, and related mouse phenotypes are hematopoietic system and immune system. A disorder affecting the salivary glands.
(http://www.malacards.com/card/salivary_gland_disease)

* Sebaceous Gland Disease, also known as sebaceous gland diseases, is related to acne and scleroperikeratitis, and has symptoms including exanthema, pruritus and skin manifestations. An important gene associated with Sebaceous Gland Disease is SHBG (Sex Hormone Binding Globulin), and among its related pathways are A-beta Pathways: Plaque Formation and APP Metabolism and Bacterial infections in CF airways. Affiliated tissues include the sebaceous gl, skin and testes. A skin disease that is located in the sebaceous gland.
(http://www.malacards.org/card/sebaceous_gland_disease)

* Sensory Peripheral Neuropathy, also known as sensory neuropathy, is related to hereditary motor and sensory neuropathy via and hereditary motor and sensory neuropathy v, and has symptoms including hyperesthesia, sciatica and dysesthesia. An important gene associated with Sensory Peripheral Neuropathy is PMP22 (Peripheral Myelin Protein 22), and among its related pathways are Neural Crest Differentiation and Guidance Cues and Growth Cone Motility. Affiliated tissues include spinal cord, testes and brain, and related mouse phenotypes are Increased shRNA abundance (Z-score > 2) and reproductive system. A neuropathy that involves damage to nerves of the peripheral nervous system.
(http://www.malacards.org/card/sensory_peripheral_neuropathy)

* Sweat Gland Disease, also known as sweat gland diseases, is related to gall bladder carcinoma in situ and lung occult small cell carcinoma, and has symptoms including exanthema, pruritus and increased sweating. An important gene associated with Sweat Gland Disease is NTRK1 (Neurotrophic Receptor Tyrosine Kinase 1), and among its related pathways are Activation of TRKA receptors and 14-3-3 and Regulation of BAD Activity. Affiliated tissues include skin, and related mouse phenotypes are integument and vision/eye.
(http://www.malacards.com/card/sweat_gland_disease)

* Tremor is related to essential tremor and parkinson disease 6, early onset. An important gene associated with Tremor is DRD3 (Dopamine Receptor D3), and among its related pathways are Alpha-synuclein signaling and Parkinsons Disease Pathway. Affiliated tissues include brain, eye and tongue, and related mouse phenotypes are integument and cardiovascular system. An unintentional, rhythmic, muscle movement involving to-and-fro movements of one or more parts of the body. Most tremors occur in

the hands, although they can also affect the arms, head, face, voice, trunk, and legs. (http://www.malacards.org/card/tremor)

1.3.2.5 RT-MB-30

https://archive.org/details/Resonant_Therapy-Molecular_Biology_30

Genetic Superpathways-Abdominal Obesity Metabolic Syndrome; Genetic Superpathways-Aromatase Deficiency; Genetic Superpathways-Cerebral Hypoxia; Genetic Superpathways-Corticiobasal Degeneration; Genetic Superpathways-Dementia Frontotemporal; Genetic Superpathways-Gastrointestinal Disease; Genetic Superpathways-Glucose Metabolism Disease; Genetic Superpathways-Growth Hormone Deficiency; Genetic Superpathways-Leber Optic Atrophy; Genetic Superpathways-Metabolic Acidosis; Genetic Superpathways-Mineral Metabolism Disease; Genetic Superpathways-Mouth Disease; Genetic Superpathways-Paranasal Sinus Disease; Genetic Superpathways-Periodontal Disease; Genetic Superpathways-Peripheral Vascular Disease; Genetic Superpathways-Postmenopausal Atrophic Vaginitis; Genetic Superpathways-Protein Energy Malnutrition; Genetic Superpathways-Pulpitis; Genetic Superpathways-Upper Respiratory Tract Disease; Genetic Superpathways-Vasculitis; Genetics-Brachial Plexus Lesion; Genetics-Brain Ischemia; Genetics-Chronic Pain; Genetics-Coenzyme Q10 Deficiency; Genetics-Dental Caries; Genetics-Dentin Sensitivity; Genetics-Lactose Intolerance; Genetics-Nonsyndromic Deafness; Genetics-Root Caries; Vatiquinone

* Abdominal Obesity-Metabolic Syndrome, also known as abdominal obesity metabolic syndrome, is related to abdominal obesity-metabolic syndrome 3 and abdominal obesity-metabolic syndrome 1, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Abdominal Obesity-Metabolic Syndrome is DYRK1B (Dual Specificity Tyrosine Phosphorylation Regulated Kinase 1B), and among its related pathways are Signaling events mediated by PTP1B and Cori Cycle. Related mouse phenotypes are Decreased viability and hematopoietic system. A condition characterized by clustering of certain factors that increase an individual's susceptibility to cardiovascular diseases, stroke, and diabetes. These factors include abdominal obesity, atherogenic dyslipidemia, hypertension, insulin resistance, and a prothrombotic and proinflammatory state. (http://www.malacards.org/card/abdominal_obesity_metabolic_syndrome)

* Aromatase Deficiency, also known as congenital estrogen deficiency, is related to estrogen resistance and her2-receptor positive breast cancer, and has symptoms including hyperlipidemia, osteoporosis and cryptorchidism. An important gene associated with Aromatase Deficiency is CYP19A1 (Cytochrome P450 Family 19 Subfamily A Member 1), and among its related pathways/superpathways are Prolactin Signaling Pathway and TRP channels. The drugs Anastrozole and Vitamin D have been

mentioned in the context of this disorder. Affiliated tissues include breast, bone and ovary, and related phenotypes are Decreased viability and cellular. Aromatase deficiency is a condition characterized by reduced levels of the female sex hormone estrogen and increased levels of the male sex hormone testosterone. (http://www.malacards.org/card/aromatase_deficiency)

* Brachial Plexus Lesion, also known as brachial plexus injuries, is related to aneurysm and non-recovering obstetric brachial plexus lesion. An important gene associated with Brachial Plexus Lesion is SERPINI2 (Serpin Family I Member 2), and among its related pathways are G-protein signaling M-RAS regulation pathway and Guidance Cues and Growth Cone Motility. Affiliated tissues include skin and spinal cord, and related mouse phenotypes are behavior/neurological and growth/size/body region. A brachial plexus neuropathy characterized by an abnormality, usually caused by disease or trauma, located in the brachial plexus. (http://www.malacards.org/card/brachial_plexus_lesion)

* Brain Ischemia is related to ischemia and neuronitis. An important gene associated with Brain Ischemia is KCNB1 (Potassium Voltage-Gated Channel Subfamily B Member 1), and among its related pathways are Endothelin Pathways and Melatonin metabolism and effects. The drugs etomidate and pentoxifylline have been mentioned in the context of this disorder. Affiliated tissues include brain, cortex and endothelial. A condition in which there is insufficient blood flow to the brain to meet metabolic demand. (http://www.malacards.org/card/brain_ischemia)

* Cerebral Hypoxia, also known as brain hypoxia, is related to hypoxia and anoxia. An important gene associated with Cerebral Hypoxia is FOS (Fos Proto-Oncogene, AP-1 Transcription Factor Subunit), and among its related pathways are PDGFR-alpha signaling pathway and Signal transduction by L1. Affiliated tissues include brain, endothelial and monocytes, and related mouse phenotypes are Decreased viability with paclitaxel and neoplasm. A condition in which there is a decrease of oxygen supply to the brain even though there is adequate blood flow. (http://www.malacards.org/card/cerebral_hypoxia)

* Chronic Pain, also known as pain - chronic, is related to cervicitis and chronic pain requiring intraspinal analgesia. An important gene associated with Chronic Pain is PTGS2 (Prostaglandin-Endoperoxide Synthase 2), and among its related pathways are Celecoxib Pathway, Pharmacodynamics and Photodynamic therapy-induced NF-kB survival signaling. Affiliated tissues include spinal cord, brain and testes, and related mouse phenotypes are integument and endocrine/exocrine gland. A pain that lasts a long time. (http://www.malacards.org/card/chronic_pain)

* Coenzyme Q10 Deficiency Disease, also known as coenzyme q10 deficiency, is related to coenzyme q10 deficiency, primary, 4 and coenzyme q10 deficiency, primary, 1, and has symptoms including cataract, hyperextensible skin and intellectual disability. An important gene associated with Coenzyme Q10 Deficiency Disease is COQ2 (Coenzyme Q2, Polyprenyltransferase), and among its related pathways/superpathways are Metabolism and Ubiquinol biosynthesis. The drugs Menthol and Simvastatin have

been mentioned in the context of this disorder. Affiliated tissues include kidney, brain and skin, and related phenotype is adipose tissue. A mitochondrial metabolism disease that is characterized by a deficiency of CoQ10 resulting from reduced biosynthesis. (http://www.malacards.org/card/coenzyme_q10_deficiency_disease)

* Corticobasal Degeneration, also known as corticobasal syndrome, is related to pick disease and progressive supranuclear palsy-corticobasal syndrome. An important gene associated with Corticobasal Degeneration is MAPT (Microtubule Associated Protein Tau), and among its related pathways/superpathways are NFAT and Cardiac Hypertrophy and Development Slit-Robo signaling. The drugs Iodine and cadexomer iodine have been mentioned in the context of this disorder. Affiliated tissues include cortex, brain and tongue, and related phenotypes are Decreased viability with paclitaxel and behavior/neurological. A progressive neurological disorder characterized by nerve cell loss and atrophy (shrinkage) of multiple areas of the brain including the cerebral cortex and the basal ganglia. (http://www.malacards.org/card/corticobasal_degeneration)

* Dementia, Frontotemporal, also known as frontotemporal dementia, is related to pick disease and frontotemporal dementia and/or amyotrophic lateral sclerosis 2, and has symptoms including personality changes, irritability and parkinsonism. An important gene associated with Dementia, Frontotemporal is PSEN1 (Presenilin 1), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Neuroscience. The drugs Dopamine and Memantine have been mentioned in the context of this disorder. Affiliated tissues include brain, temporal lobe and amygdala, and related phenotypes are behavior/neurological and cellular. A basal ganglia disease characterized by progressive neuronal loss predominantly involving the frontal and/or temporal lobes of the brain resulting in a gradual and progressive decline in behavior or language. (http://www.malacards.org/card/dementia_frontotemporal)

* Dental Caries, also known as dental caries extending into pulp, is related to dentin caries and root caries, and has symptoms including halitosis and snoring. An important gene associated with Dental Caries is CD79A (CD79a Molecule), and among its related pathways is Salivary secretion. The drug aluminum chloride has been mentioned in the context of this disorder. Affiliated tissues include colon, salivary gland and testes, and related mouse phenotypes are Decreased viability and Increased gamma-H2AX phosphorylation. (http://www.malacards.org/card/dental_caries)

* Dentin Sensitivity, also known as sensitive dentin, is related to periodontitis and cervicitis, and has symptoms including toothache An important gene associated with Dentin Sensitivity is DSPP (Dentin Sialophosphoprotein), and among its related pathways are Hepatic ABC Transporters and Potassium Channels. Affiliated tissues include testes, and related mouse phenotypes are hearing/vestibular/ear and taste/olfaction. A dental pain which is sharp in character and of short duration, arising from exposed dentin surfaces in response to stimuli, typically thermal, evaporative, tactile, osmotic, chemical or electrical; and which cannot be ascribed to any other dental

disease. (http://www.malacards.org/card/dentin_sensitivity)

* Gastrointestinal System Disease, also known as gastrointestinal diseases, is related to lymphocytic gastritis and celiac disease, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Gastrointestinal System Disease is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways are Secretion of Hydrochloric Acid in Parietal Cells and Gastric acid production. The drugs sacrosidase and belladonna extract, usp have been mentioned in the context of this disorder. Affiliated tissues include the gastrointestinal tract, liver and small intestine, and related mouse phenotypes are digestive/alimentary and homeostasis/metabolism. A disease involving the gastrointestinal tract, namely the esophagus, stomach, small intestine, large intestine and rectum, and the accessory organs of digestion, the liver, gallbladder, and pancreas. (http://www.malacards.org/card/gastrointestinal_system_disease)

* Glucose Metabolism Disease, also known as glucose metabolism disorders, is related to diabetes mellitus, insulin-dependent and hemolytic anemia due to triosephosphate isomerase deficiency. An important gene associated with Glucose Metabolism Disease is INS (Insulin), and among its related pathways are Differentiation of white and brown adipocyte and Signaling events mediated by PTP1B. Related mouse phenotypes are adipose tissue and liver/biliary system. A pathological condition in which the blood glucose cannot be maintained within the normal range, such as in Hypoglicemia and Hyperglicemia. (http://www.malacards.org/card/glucose_metabolism_disease)

* Growth Hormone Deficiency, also known as isolated somatotropin deficiency, is related to growth hormone insensitivity, partial and isolated growth hormone deficiency. An important gene associated with Growth Hormone Deficiency is GH1 (Growth Hormone 1), and among its related pathways/superpathways are G-Beta Gamma Signaling and Peptide hormone metabolism. The drugs Clonidine and Estradiol have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and pituitary, and related phenotypes are endocrine/exocrine gland and adipose tissue. A medical condition, caused by problems arising in the pituitary gland, in which the body does not produce enough growth hormone (GH). (http://www.malacards.org/card/growth_hormone_deficiency)

* Lactose Intolerance, also known as lm - lactose malabsorption, is related to congenital sucrase-isomaltase deficiency with starch and lactose intolerance and lactase persistence/nonpersistence, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Lactose Intolerance is LCT (Lactase), and among its related pathways are Carbohydrate digestion and absorption and Digestion of dietary carbohydrate. Affiliated tissues include testes, small intestine and kidney. An impaired ability to digest lactose, a sugar found in milk and other dairy products. (http://www.malacards.org/card/lactose_intolerance)

* Leber Optic Atrophy, also known as leber hereditary optic neuropathy, is related to loiasis and leber hereditary optic neuropathy with dystonia, and has symptoms including

optic atrophy, ataxia and peripheral neuropathy. An important gene associated with Leber Optic Atrophy is MT-ND6 (Mitochondrially Encoded NADH:Ubiquinone Oxidoreductase Core Subunit 6), and among its related pathways/superpathways are Metabolism and Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. The drugs Idebenone and Antioxidants have been mentioned in the context of this disorder. Affiliated tissues include eye. A maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. (http://www.malacards.org/card/leber_optic_atrophy)

* Metabolic Acidosis is related to glutathione synthetase deficiency and renal tubular acidosis. An important gene associated with Metabolic Acidosis is ALB (Albumin), and among its related pathways are Pancreatic secretion and Biotin metabolism. Affiliated tissues include kidney, bone and heart, and related mouse phenotypes are renal/urinary system and homeostasis/metabolism. A condition that occurs when the body produces excessive quantities of acid or when the kidneys are not removing enough acid from the body. If unchecked, metabolic acidosis leads to acidemia -low blood pH- due to increased production of hydrogen ions by the body or the inability of the body to form bicarbonate in the kidney. Its causes are diverse, and its consequences can be serious, including coma and death. (http://www.malacards.org/card/metabolic_acidosis)

* Mineral Metabolism Disease, also known as disorder of mineral metabolism, is related to toxicodendron dermatitis and stickler syndrome. An important gene associated with Mineral Metabolism Disease is CASR (Calcium Sensing Receptor), and among its related pathways are Osteoblast Signaling and Development_Hedgehog and PTH signaling pathways in bone and cartilage development. Related mouse phenotypes are limbs/digits/tail and digestive/alimentary. An acquired metabolic disease that is characterized by abnormal mineral metabolism. (http://www.malacards.org/card/mineral_metabolism_disease)

* Mouth Disease, also known as mouth diseases, is related to hepatitis and burns, and has symptoms including coughing, halitosis and oral manifestations. An important gene associated with Mouth Disease is IL6 (Interleukin 6), and among its related pathways are Glucocorticoid receptor regulatory network and IL-10 Pathway. The drugs lidocaine hydrochloride and lidocaine pwdr have been mentioned in the context of this disorder. Affiliated tissues include the mouth, tongue and testes, and related mouse phenotypes are hematopoietic system and skeleton. A gastrointestinal system disease that is located in the mouth. (http://www.malacards.org/card/mouth_disease)

* Nonsyndromic Deafness, also known as nonsyndromic hearing loss, is related to autosomal dominant nonsyndromic deafness 20 and autosomal dominant nonsyndromic deafness 66. An important gene associated with Nonsyndromic Deafness is GJB2 (Gap Junction Protein Beta 2), and among its related pathways is Gap junction trafficking. Related mouse phenotypes are behavior/neurological and hearing/vestibular/ear. Nonsyndromic hearing loss is a partial or total loss of hearing that is not associated with other signs and symptoms. (http://www.malacards.org/card/nonsyndromic_deafness)

* Paranasal Sinus Disease, also known as paranasal sinus diseases, is related to myoglobinuria recurrent and dahlberg borer newcomer syndrome. An important gene associated with Paranasal Sinus Disease is IL5 (Interleukin 5), and among its related pathways are Inflammatory Response Pathway and IL4-mediated signaling events. Affiliated tissues include eye, bone and t cells, and related mouse phenotypes are craniofacial and neoplasm. (http://www.malacards.org/card/paranasal_sinus_disease)

* Periodontal Disease, also known as periodontal diseases, is related to tuberculosis and peripheral vascular disease, and has symptoms including halitosis, snoring and tenderness of gums. An important gene associated with Periodontal Disease is IL1B (Interleukin 1 Beta), and among its related pathways are Interleukin-1 processing and Dendritic Cells Developmental Lineage Pathway. The drugs chlorhexidine gluconate and chlorhexidine have been mentioned in the context of this disorder. Affiliated tissues include bone, neutrophil and t cells, and related mouse phenotypes are limbs/digits/tail and renal/urinary system. A set of inflammatory diseases affecting the tissues surrounding the teeth. (http://www.malacards.org/card/periodontal_disease)

* Peripheral Vascular Disease, also known as arterial occlusive disease, is related to artery disease and limb ischemia, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Peripheral Vascular Disease is VWF (Von Willebrand Factor), and among its related pathways are Dissolution of Fibrin Clot and Malaria. The drugs streptokinase and papaverine hydrochloride have been mentioned in the context of this disorder. Affiliated tissues include bone, heart and endothelial, and related mouse phenotypes are Decreased free cholesterol and neoplasm. A vascular disease that is characterized by obstruction of larger arteries not within the coronary, aortic arch vasculature, or brain. (http://www.malacards.com/card/peripheral_vascular_disease)

* Postmenopausal Atrophic Vaginitis, also known as atrophic vaginitis, is related to comedo carcinoma and deafness, autosomal dominant 8/12. An important gene associated with Postmenopausal Atrophic Vaginitis is PRLR (Prolactin Receptor), and among its related pathways/superpathways are Prolactin Signaling Pathway and TGF-beta Signaling Pathways. The drugs Hyaluronic acid and Apricot have been mentioned in the context of this disorder. Related phenotypes are behavior/neurological and adipose tissue. An inflammation of the vagina (and the outer urinary tract) due to the thinning and shrinking of the tissues, as well as decreased lubrication. These symptoms are due to a lack of the reproductive hormone estrogen. (http://www.malacards.org/card/postmenopausal_atrophic_vaginitis)

* Protein-Energy Malnutrition, also known as pem, is related to hypervitaminosis a and malaria, and has symptoms including cachexia and emaciation. An important gene associated with Protein-Energy Malnutrition is ALB (Albumin), and among its related pathways/superpathways are Sudden Infant Death Syndrome (SIDS) Susceptibility Pathways and Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers. The drugs Morphine and Naproxen have been

mentioned in the context of this disorder. Affiliated tissues include liver, prostate and brain, and related phenotypes are homeostasis/metabolism and hematopoietic system. A form of malnutrition which is defined as a range of pathological conditions arising from coincident lack of protein and/or energy in varying proportions. (http://www.malacards.org/card/protein_energy_malnutrition)

* Pulpitis is related to periapical periodontitis and intussusception. An important gene associated with Pulpitis is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways are EBV LMP1 signaling and LDL Oxidation in Atherogenesis. Affiliated tissues include trigeminal ganglion, testes and bone, and related mouse phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and adipose tissue. Inflammation of dental pulp tissue. (http://www.malacards.org/card/pulpitis)

* Root Caries, also known as dental caries of root surface, is related to periodontitis and viral meningitis. An important gene associated with Root Caries is DSPP (Dentin Sialophosphoprotein), and among its related pathways are BRCA1 Pathway and Transcription Ligand-dependent activation of the ESR1/SP pathway. Affiliated tissues include bone, and related mouse phenotypes are liver/biliary system and neoplasm. (http://www.malacards.org/card/root_caries)

* Upper Respiratory Tract Disease is related to tuberculosis and adenoiditis. An important gene associated with Upper Respiratory Tract Disease is RNASE3 (Ribonuclease A Family Member 3), and among its related pathways are IL-9 Signaling Pathways and their Primary Biological Effects in Different Immune Cell Types and Glucocorticoid receptor regulatory network. Affiliated tissues include testes and brain, and related mouse phenotypes are digestive/alimentary and hematopoietic system. A respiratory system disease which involves the upper respiratory tract. (http://www.malacards.org/card/upper_respiratory_tract_disease)

* Vasculitis, also known as autoimmune vasculitis, is related to uveitis and rheumatoid arthritis, and has symptoms including angina pectoris, angina pectoris and chest pain. An important gene associated with Vasculitis is MPO (Myeloperoxidase), and among its related pathways are C-MYB transcription factor network and Thromboxane A2 receptor signaling. The drug pentoxifylline has been mentioned in the context of this disorder. Affiliated tissues include neutrophil, endothelial and lung, and related mouse phenotypes are cellular and homeostasis/metabolism. A vascular disease that is characterized by inflammation of the blood vessels. (http://www.malacards.org/card/vasculitis)

* Vatiquinone is a drug that is based on vitamin E. It is a potent cellular protectant against oxidative stress and aging. Vatiquinone reverses visual loss due to retinal ganglion degeneration. It also increase Glutathione which plays a central role in cellular redox balance and antioxidant defense systems. Tests have shown that it can help improve the function of cells with mitochondrial problems. It may be able to treat people with genetic disorders that affect metabolism and mitochondria. Vatiquinone has been

investigated for the treatment and prevention of Retinopathy, Rett Syndrome, Genetic Disease, Noise-induced Hearing Loss, and Methylmalonic Aciduria and Homocystinuria,Cblc Type.

1.3.2.6 RT-MB-31

https://archive.org/details/Resonant_Therapy-Molecular_Biology_31

Genetic Superpathways-Autoimmune Disease Of Blood; Genetic Superpathways-Autonomic Nervous System Disease; Genetic Superpathways-Candidiasis; Genetic Superpathways-Cardiovascular Disease Risk Factor; Genetic Superpathways-Cerebrovascular Disease; Genetic Superpathways-Chronic Fatigue Syndrome; Genetic Superpathways-Colon Adenoma; Genetic Superpathways-Colonic Disease; Genetic Superpathways-Dementia Lewy Body; Genetic Superpathways-Esophageal Disease; Genetic Superpathways-Heart Disease; Genetic Superpathways-Hypertriglyceridemia; Genetic Superpathways-Influenza; Genetic Superpathways-Liver Disease; Genetic Superpathways-Ovarian Disease; Genetic Superpathways-Pancreas Disease; Genetic Superpathways-Pituitary Gland Disease; Genetic Superpathways-Psychotic Disorder; Genetic Superpathways-Pulmonary Hypertension; Genetic Superpathways-Spondyloarthropathy; Genetic Superpathways-Stomach Disease; Genetic Superpathways-Thyroid Gland Disease; Genetic Superpathways-Toxic Encephalopathy; Genetic Superpathways-Vascular Dementia; Genetic Superpathways-Vascular Disease; Genetics-Cerebellar Disease; Genetics-Disorders Of Intracellular Cobalamin Metabolism; Genetics-Pure Autonomic Failure; Genetics-Rectal Disease; Genetics-Subacute Delirium;

* Autoimmune Disease of Blood is related to alcoholic neuropathy and calloso- genital dysplasia. An important gene associated with Autoimmune Disease of Blood is CD40LG (CD40 Ligand), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Phospholipase-C Pathway. The drugs Rivaroxaban and Adalimumab have been mentioned in the context of this disorder. Affiliated tissues include testes, t cells and pancreas, and related phenotypes are Dynamic nuclei (hole, folded or small irregular) and hematopoietic system. A hypersensitivity reaction type II disease that causes the immune system to produce antibodies or T cells against cells and/or tissues in the blood. (http://www.malacards.org/card/autoimmune_disease_of_blood)

* Autonomic Nervous System Disease, also known as autonomic nervous system disorders, is related to central hypoventilation syndrome, congenital and pandas, and has symptoms including back pain, constipation and diarrhea. An important gene associated with Autonomic Nervous System Disease is DRD4 (Dopamine Receptor D4), and among its related pathways/superpathways are Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers and Sudden Infant

Death Syndrome (SIDS) Susceptibility Pathways. The drugs Benzocaine and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include heart, lung and eye, and related phenotypes are behavior/neurological and normal. (http://www.malacards.org/card/autonomic_nervous_system_disease)

* Candidiasis, also known as systemic candidiasis, is related to esophageal candidiasis and churg-strauss syndrome. An important gene associated with Candidiasis is AIRE (Autoimmune Regulator), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Fluconazole and Miconazole have been mentioned in the context of this disorder. Affiliated tissues include brain, heart and skin, and related phenotypes are hematopoietic system and homeostasis/metabolism. An opportunistic mycosis that involves fungal infection of the mouth, throat, skin, scalp, vagina, fingers, nails, bronchi, lungs, heart and brain by Candida species, of which Candida albicans is the most common. Systemic Candida infections are usually confined to severely immunocompromised persons. (http://www.malacards.org/card/candidiasis)

* Cardiovascular Disease Risk Factor), also known as hyperlipoproteinemia type iii risk factor, is related to ischemic heart disease and arthritis. An important gene associated with Cardiovascular Disease Risk Factor) is AGTR1 (Angiotensin II Receptor Type 1), and among its related pathways/superpathways are Peptide hormone metabolism and AGE-RAGE signaling pathway in diabetic complications. Affiliated tissues include heart, endothelial and ovary, and related phenotypes are cardiovascular system and growth/size/body region. A condition characterized by increased total cholesterol and triglyceride levels, and decreased HDL levels. (http://www.malacards.org/card/cardiovascular_disease_risk_factor_)

* Cerebellar Disease, also known as cerebellar diseases, is related to cerebellar hypoplasia and mental retardation with or without quadrupedal locomotion 1 and leukodystrophy, adult-onset, autosomal dominant, and has symptoms including ataxia, back pain and cerebellar ataxia. An important gene associated with Cerebellar Disease is CACNA1A (Calcium Voltage-Gated Channel Subunit Alpha1 A), and among its related pathways/superpathways are Myometrial Relaxation and Contraction Pathways and Dopamine-DARPP32 Feedback onto cAMP Pathway. The drugs Clonidine and Estradiol have been mentioned in the context of this disorder. Affiliated tissues include cerebellum, brain and eye, and related phenotypes are behavior/neurological and nervous system. The cerebellum is the area of the brain that controls coordination and balance. problems with the cerebellum include cancer genetic disorders ataxias - failure of muscle control in the arms and legs that result in movement disorders degeneration. (http://www.malacards.org/card/cerebellar_disease)

* Cerebrovascular Disease, also known as cerebrovascular disorders, is related to ischemic heart disease and arthritis, and has symptoms including headache, transient ischemic attacks, stereotypic symptoms and angina pectoris. An important gene associated with Cerebrovascular Disease is NOTCH3 (Notch 3), and among its related pathways/superpathways are Metabolism of water-soluble vitamins and cofactors and

Binding and Uptake of Ligands by Scavenger Receptors. The drugs Rivastigmine and Amiloride have been mentioned in the context of this disorder. Affiliated tissues include brain, heart and testes, and related phenotypes are Decreased free cholesterol and Increased LDL uptake. An artery disease that is characterized by dysfunction of the blood vessels supplying the brain. (http://www.malacards.org/card/cerebrovascular_disease)

* Chronic Fatigue Syndrome, also known as myalgic encephalomyelitis, is related to personality disorder and ulcerative colitis, and has symptoms including back pain, fatigue and fever. An important gene associated with Chronic Fatigue Syndrome is RNASEL (Ribonuclease L), and among its related pathways/superpathways are Cytokine Signaling in Immune system and PAK Pathway. The drugs Dopamine and Sodium oxybate have been mentioned in the context of this disorder. Affiliated tissues include lymph node, testes and prostate, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and behavior/neurological. A syndrome that involves prolonged and severe tiredness or weariness that is unrelated to exertion, is not relieved by rest and for a minimum of six months and is not directly caused by other conditions. (http://www.malacards.org/card/chronic_fatigue_syndrome)

* Colon Adenoma, also known as adenomatous polyp of colon, is related to colorectal cancer and familial adenomatous polyposis 4. An important gene associated with Colon Adenoma is GSTT2 (Glutathione S-Transferase Theta 2 (Gene/Pseudogene)), and among its related pathways/superpathways are Nanog in Mammalian ESC Pluripotency and Development HGF signaling pathway. The drugs Erythromycin and Adjuvants, Anesthesia have been mentioned in the context of this disorder. Affiliated tissues include colon, testes and eye, and related phenotypes are Increased cell death HMECs cells and cardiovascular system. A colonic benign neoplasm that has material basis in epithelial tissue with glandular origin. (http://www.malacards.org/card/colon_adenoma)

* Colonic Disease, also known as colonic diseases, is related to functional colonic disease and fallopian tube clear cell adenocarcinoma, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Colonic Disease is NOD2 (Nucleotide Binding Oligomerization Domain Containing 2), and among its related pathways/superpathways are Cytokine Signaling in Immune system and Prolactin Signaling Pathway. The drugs Bisacodyl and Benzocaine have been mentioned in the context of this disorder. Affiliated tissues include colon, liver and testes, and related phenotypes are Increased shRNA abundance (Z-score > 2) and behavior/neurological. (http://www.malacards.org/card/colonic_disease)

* Dementia, Lewy Body, also known as lewy body dementia, is related to parkinson disease, late-onset and parkinson disease 1, and has symptoms including delusions, parkinsonism and dementia. An important gene associated with Dementia, Lewy Body is SNCA (Synuclein Alpha), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Circadian entrainment. The drugs Armodafinil and Modafinil have been mentioned in the context of this disorder. Affiliated tissues

include brain, eye and testes, and related phenotypes are homeostasis/metabolism and behavior/neurological. A neurodegenerative disorder characterized by mental impairment leading to dementia, parkinsonism, fluctuating cognitive function, visual hallucinations, falls, syncopal episodes, and sensitivity to neuroleptic medication. (http://www.malacards.org/card/dementia_lewy_body)

* Disorders of Intracellular Cobalamin Metabolism An important gene associated with Disorders of Intracellular Cobalamin Metabolism is MTRR (5- Methyltetrahydrofolate-Homocysteine Methyltransferase Reductase). (http://www.malacards.org/card/disorders_of_intracellular_cobalamin_metabolism)

* Esophageal Disease, also known as esophageal diseases, is related to lymphoma and deep angioma, and has symptoms including abdominal pain, constipation and coughing. An important gene associated with Esophageal Disease is ATP4A (ATPase H+/K+ Transporting Alpha Subunit), and among its related pathways/superpathways are Interleukin-4 and 13 signaling and Glucocorticoid receptor regulatory network. The drugs Octreotide and Somatostatin have been mentioned in the context of this disorder. Affiliated tissues include lung, testes and lymph node, and related phenotypes are digestive/alimentary and homeostasis/metabolism. A gastrointestinal system disease that is located in the esophagus. (http://www.malacards.org/card/esophageal_disease)

* Heart Disease, also known as congenital heart disease, is related to jervell and lange-nielsen syndrome and sick sinus syndrome 1, and has symptoms including hypoplastic left heart, angina pectoris and chest pain. An important gene associated with Heart Disease is GATA4 (GATA Binding Protein 4), and among its related pathways/superpathways are Vascular smooth muscle contraction and Human Embryonic Stem Cell Pluripotency. The drugs Ranolazine and Iloprost have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and testes, and related phenotypes are cardiovascular system and growth/size/body region. A cardiovascular system disease that involves the heart. (http://www.malacards.org/card/heart_disease)

* Hypertriglyceridemia, also known as hypertriglyceridemia, familial, is related to hyperlipoproteinemia type iv and lipodystrophy, familial partial, type 2, and has symptoms including precocious atherosclerosis, abnormal glucose tolerance and atheroeruptive xanthoma. An important gene associated with Hypertriglyceridemia is LIPI (Lipase I), and among its related pathways/superpathways are Metabolism and Regulation of lipid metabolism by Peroxisome proliferator-activated receptor alpha (PPARalpha). The drugs Metformin and Saxagliptin have been mentioned in the context of this disorder. Affiliated tissues include liver, heart and endothelial, and related phenotypes are Decreased free cholesterol and Increased LDL uptake. Hypertriglyceridemia denotes high blood levels of triglycerides. (http://www.malacards.org/card/hypertriglyceridemia)

* Influenza, also known as flu, is related to hepatitis c virus and avian influenza, and has symptoms including coughing, fever and pruritus. An important gene associated with

Influenza is IVNS1ABP (Influenza Virus NS1A Binding Protein), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Tequin and Oseltamivir have been mentioned in the context of this disorder. Affiliated tissues include testes, lung and t cells, and related phenotypes are Decreased influenza A H1N1 (A/Hamburg /04/2009) virus numbers and Decreased influenza A H1N1 (A/WSN/33) virus numbers. A viral infectious disease that results_in infection, located in respiratory tract, has material basis in Influenzavirus A, B, or C, which are transmitted_by droplet spread of oronasal secretions during coughing, sneezing, or talking from an infected person. It is a highly contagious disease that affects birds and mammals and has symptoms chills, fever, sore throat, runny nose, muscle pains, severe headache, cough, and weakness. (http://www.malacards.org/card/influenza)

* Liver Disease, also known as liver diseases, is related to alpha 1-antitrypsin deficiency and congenital dyserythropoietic anemia, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Liver Disease is SERPINA1 (Serpin Family A Member 1), and among its related pathways/superpathways are Metabolism and Adipogenesis. The drugs Amlodipine and Perindopril have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and kidney, and related phenotypes are homeostasis/metabolism and growth/size/body region. A type of damage to or disease of the liver. (http://www.malacards.org/card/liver_disease)

* Ovarian Disease, also known as ovarian dysfunction, is related to endometriosis and ovarian hyperstimulation syndrome, and has symptoms including pelvic pain and mittelschmerz. An important gene associated with Ovarian Disease is GNRH1 (Gonadotropin Releasing Hormone 1), and among its related pathways/superpathways are Prolactin Signaling Pathway and Peptide hormone metabolism. The drugs Metformin and Ganirelix have been mentioned in the context of this disorder. Affiliated tissues include ovary, testes and lung, and related phenotypes are endocrine/exocrine gland and homeostasis/metabolism. Endocrine disorders or disorders of the reproductive system. (http://www.malacards.org/card/ovarian_disease)

* Pancreas Disease, also known as abnormality of the pancreas, is related to endocrine pancreas disease and functioning pituitary adenoma, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Pancreas Disease is INS (Insulin), and among its related pathways/superpathways are Peptide ligand-binding receptors and G alpha (s) signalling events. The drugs Pancrelipase and Secretin have been mentioned in the context of this disorder. Affiliated tissues include pancreas, lung and liver, and related phenotypes are homeostasis/metabolism and adipose tissue. An endocrine system disease that is located in the pancreas. (http://www.malacards.org/card/pancreas_disease)

* Pituitary Gland Disease, also known as pituitary dysfunction, is related to retinal dystrophy, early-onset, and pituitary dysfunction and microphthalmia, syndromic 5, and has symptoms including back pain, headache and pain. An important gene associated

with Pituitary Gland Disease is IGF1 (Insulin Like Growth Factor 1), and among its related pathways/superpathways are Peptide ligand-binding receptors and p70S6K Signaling. The drugs Menthol and Hydrocortisone have been mentioned in the context of this disorder. Affiliated tissues include pituitary, brain and testes, and related phenotypes are endocrine/exocrine gland and growth/size/body region. An endocrine system disease that is located in the pituitary gland. (http://www.malacards.org/card/pituitary_gland_disease)

* Psychotic Disorder, also known as psychotic disorders, is related to schizophrenia 9 and schizophrenia, and has symptoms including alexithymia, decreased libido and increased libido. An important gene associated with Psychotic Disorder is DISC1 (Disrupted In Schizophrenia 1), and among its related pathways/superpathways are Neuroscience and Circadian rythm related genes. The drugs Aripiprazole and Asenapine have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and heart, and related phenotypes are Decreased shRNA abundance (Z-score < -2) and behavior/neurological. A cognitive disorder that involves abnormal thinking and perceptions resulting in a disconnection with reality. (http://www.malacards.org/card/psychotic_disorder)

* Pulmonary Hypertension, also known as primary pulmonary hypertension, is related to pulmonary venoocclusive disease 1 and antiphospholipid syndrome, and has symptoms including angina pectoris, chest pain and coughing. An important gene associated with Pulmonary Hypertension is BMPR2 (Bone Morphogenetic Protein Receptor Type 2), and among its related pathways/superpathways are Vascular smooth muscle contraction and Human Embryonic Stem Cell Pluripotency. The drugs Adcirca and Adempas have been mentioned in the context of this disorder. Affiliated tissues include Lung, heart and lung, and related phenotypes are cardiovascular system and behavior/neurological. A chronic pulmonary heart disease characterized by an increase of blood pressure in the pulmonary artery, pulmonary vein, or pulmonary capillaries, among others, has symptoms shortness of breath, dizziness, fainting, leg swelling. (http://www.malacards.org/card/pulmonary_hypertension)

* Pure Autonomic Failure, also known as idiopathic orthostatic hypotension, is related to adenocarcinoma and pleurisy. An important gene associated with Pure Autonomic Failure is DBH (Dopamine Beta-Hydroxylase), and among its related pathways/superpathways are Activated PKN1 stimulates transcription of AR (androgen receptor) regulated genes KLK2 and KLK3 and Circadian entrainment. The drugs Midodrine and Droxidopa have been mentioned in the context of this disorder. Affiliated tissues include heart, brain and spinal cord, and related phenotypes are behavior/neurological and homeostasis/metabolism. A generalized autonomic failure without central nervous system (brain or spinal cord) involvement. the autonomic nervous system is the part of the body that controls involuntary actions, such as the widening or narrowing of the blood vessels. failure of this system can cause a variety of symptoms. the most common symptom of pure autonomic failure is orthostatic hypotension. other symptoms may include decreased sweating, heat intolerance, inability to empty the bladder, erectile dysfunction, incontinence or constipation, and

pupil changes. (http://www.malacards.org/card/pure_autonomic_failure)

* Rectal Disease, also known as rectal diseases, is related to proctitis and scalp dermatosis, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Rectal Disease is KIDINS220 (Kinase D Interacting Substrate 220), and among its related pathways/superpathways is MSP- RON Signaling. The drugs Aspirin and Iron have been mentioned in the context of this disorder. Affiliated tissues include liver, colon and testes. (http://www.malacards.org/card/rectal_disease)

* Spondyloarthropathy, also known as spondylarthropathies, is related to spondyloarthropathy 1 and ulcerative colitis, and has symptoms including sciatica An important gene associated with Spondyloarthropathy is HLA-B (Major Histocompatibility Complex, Class I, B), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Adalimumab and Pamidronate have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and t cells, and related phenotypes are Increased shRNA abundance (Z-score > 2) and homeostasis/metabolism. Any joint disease of the vertebral column. (http://www.malacards.org/card/spondyloarthropathy)

* Stomach Disease, also known as stomach diseases, is related to non-hypoproteinemic hypertrophic gastropathy and functional gastric disease, and has symptoms including abdominal pain, constipation and diarrhea. An important gene associated with Stomach Disease is DDX21 (DExD-Box Helicase 21), and among its related pathways/superpathways are Peptide ligand-binding receptors and Salivary secretion. The drugs Epinephrine and Racepinephrine have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and lung, and related phenotypes are digestive/alimentary and homeostasis/metabolism. A gastrointestinal system disease that is located in the stomach. (http://www.malacards.org/card/stomach_disease)

* Subacute Delirium, also known as delirium, is related to reye syndrome and insomnia, fatal familial, and has symptoms including ataxia, back pain and headache. An important gene associated with Subacute Delirium is APOH (Apolipoprotein H). The drug Hypnotics and Sedatives has been mentioned in the context of this disorder. (http://www.malacards.org/card/subacute_delirium)

* Thyroid Gland Disease, also known as thyroid diseases, is related to autoimmune thyroid disease 3 and igg4-related thyroid disease. An important gene associated with Thyroid Gland Disease is TG (Thyroglobulin), and among its related pathways/superpathways are Peptide ligand-binding receptors and Allograft rejection. The drugs Bimatoprost and Latanoprost have been mentioned in the context of this disorder. Affiliated tissues include thyroid, eye and heart, and related phenotypes are endocrine/exocrine gland and growth/size/body region. An endocrine system disease that is located in the thyroid. (http://www.malacards.org/card/thyroid_gland_disease)

* Toxic Encephalopathy, also known as neurotoxicity syndromes, is related to neuroblastoma and alzheimer disease. An important gene associated with Toxic Encephalopathy is HMOX1 (Heme Oxygenase 1), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Circadian entrainment. The drugs Oxaliplatin and Aripiprazole have been mentioned in the context of this disorder. Affiliated tissues include brain, skin and testes, and related phenotypes are Decreased caspase 3/7 activity and behavior/neurological. A nervous system disease that results from exposure to neurotoxicants and is characterized by an altered mental status, memory loss, and visual problems. (http://www.malacards.org/card/toxic_encephalopathy)

* Vascular Dementia, also known as dementia, vascular, is related to dementia and binswanger's disease. An important gene associated with Vascular Dementia is APOE (Apolipoprotein E), and among its related pathways/superpathways are Neuroscience and Alzheimers Disease Pathway. The drugs Citalopram and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and cortex, and related phenotypes are homeostasis/metabolism and behavior/neurological. A dementia that involves impairments in cognitive function caused by problems in blood vessels that feed the brain. (http://www.malacards.org/card/vascular_dementia)

* Vascular Disease, also known as vascular diseases, is related to adams-oliver syndrome 5 and capillary hemangioma, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Vascular Disease is MTHFR (Methylenetetrahydrofolate Reductase), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Glucose / Energy Metabolism. The drugs Ethanol and Heparin have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and kidney, and related phenotypes are cardiovascular system and homeostasis/metabolism. A cardiovascular system disease that primarily affects the blood vessels which includes the arteries, veins and capillaries that carry blood to and from the heart. (http://www.malacards.org/card/vascular_disease)

1.3.2.7 RT-MB-32

https://archive.org/details/Resonant_Therapy-Molecular_Biology_32

Genetic_Superpathways-Aggressive Periodontitis; Genetic Superpathways-Allergic Conjunctivitis; Genetic_Superpathways-Allergic Hypersensitivity; Genetic Superpathways-Arteriolosclerosis; Genetic Superpathways-Atherosclerosis; Genetic_Superpathways-Atopy; Genetic Superpathways-Blepharoconjunctivitis; Genetic Superpathways-Common Cold; Genetic Superpathways-Demyelinating Disease; Genetic_Superpathways-Dermatitis; Genetic Superpathways-Hyperglycemia; Genetic Superpathways-Intestinal Disease; Genetic Superpathways-Lymph Node Disease; Genetic_Superpathways-Movement Disease; Genetic Superpathways-Multiple

Sclerosis Disease Progression Modifier Of; Genetic Superpathways-Narcissistic Personality Disorder; Genetic Superpathways-Neuromuscular Junction Disease; Genetic Superpathways-Obesity; Genetic Superpathways-Palmoplantar Keratosis; Genetic Superpathways-Paranoid Schizophrenia; Genetic Superpathways-Pulmonary Emphysema; Genetic Superpathways-Root Resorption; Genetic Superpathways-Spondyloarthropathy 1; Genetic Superpathways-Tendinopathy; Genetic Superpathways-Tendinosis; Genetic Superpathways-Tooth Resorption; Genetic Superpathways-Withdrawal Disorder; Genetics-Androgenic Alopecia; Genetics-Radioulnar Synostosis; Genetics-Telogen Effluvium

* Aggressive Periodontitis, also known as periodontitis, juvenile, is related to rheumatoid arthritis and susceptibility to localized juvenile periodontitis. An important gene associated with Aggressive Periodontitis is IL1B (Interleukin 1 Beta), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Estradiol and Ethinyl Estradiol have been mentioned in the context of this disorder. Affiliated tissues include bone, neutrophil and monocytes, and related phenotypes are hematopoietic system and homeostasis/metabolism. A periodontitis that is characterized by rapid attachment loss and bone destruction in the presence of little local factors such as dental plaque and dental calculus resulting in inflammation and a loss of periodontium.
(http://www.malacards.org/card/aggressive_periodontitis)

* Allergic Conjunctivitis, also known as conjunctivitis, allergic, is related to lymphoma and asthma. An important gene associated with Allergic Conjunctivitis is RNASE3 (Ribonuclease A Family Member 3), and among its related pathways/superpathways are Innate Immune System and TGF-Beta Pathway. The drugs Alcaftadine and Ephedrine have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and skin, and related phenotypes are hematopoietic system and homeostasis/metabolism. A chronic conjunctivitis that is an inflammation of the conjunctiva involing red, itchy, and watery eyes a resulting from an exposure to an allergen or an irritant.
(http://www.malacards.org/card/allergic_conjunctivitis)

* Allergic Hypersensitivity Disease, also known as hypersensitivity, is related to neonatal jaundice and asthma, and has symptoms including coughing, exanthema and pruritus. An important gene associated with Allergic Hypersensitivity Disease is IL5 (Interleukin 5), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Alcaftadine and Histamine have been mentioned in the context of this disorder. Affiliated tissues include testes, skin and eye, and related phenotypes are hematopoietic system and immune system. An immune system disease that is an exaggerated immune response to allergens, such as insect venom, dust mites, pollen, pet dander, drugs or some foods.
(http://www.malacards.org/card/allergic_hypersensitivity_disease)

* Androgenic Alopecia, also known as androgenetic alopecia, is related to alopecia, androgenetic, 1 and ulceroglandular tularemia. An important gene associated with Androgenic Alopecia is SHBG (Sex Hormone Binding Globulin), and among its related pathways/superpathways are Transcription Androgen Receptor nuclear signaling and Coregulation of Androgen receptor activity. The drugs Finasteride and Minoxidil have been mentioned in the context of this disorder. Affiliated tissues include testes, prostate and bone. A hair loss that primarily affects the top and front of the scalp. In males the hair loss often presents as a receding hairline while in females it typically presents as a thinning of the hair.
(http://www.malacards.org/card/androgenic_alopecia)

* Arteriolosclerosis is related to chronic mucocutaneous candidiasis and partial circumpapillary choroid dystrophy. An important gene associated with Arteriolosclerosis is C3 (Complement C3), and among its related pathways/superpathways is Mesenchymal Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include brain, kidney and heart, and related phenotypes are hematopoietic system and immune system. A form of cardiovascular disease involving hardening and loss of elasticity of arterioles or small arteries and is most often associated with hypertension and diabetes mellitus.
(http://www.malacards.org/card/arteriolosclerosis)

* Atherosclerosis, also known as arteriosclerosis, is related to arthritis and angina pectoris, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Atherosclerosis is SELE (Selectin E), and among its related pathways/superpathways are Blood-Brain Barrier and Immune Cell Transmigration: VCAM-1/CD106 Signaling Pathways and Lipoprotein metabolism. The drugs Olmesartan and Aspirin have been mentioned in the context of this disorder. Affiliated tissues include Endothelium and Heart, and related phenotypes are Decreased free cholesterol and cardiovascular system. A disease in which the inside of an artery narrows due to the build up of plaque.
(http://www.malacards.org/card/atherosclerosis)

* Atopy, also known as hypersensitivity, immediate, is related to churg-strauss syndrome and cow milk allergy, and has symptoms including asthma, eczema and increased ige level. An important gene associated with Atopy is IL4R (Interleukin 4 Receptor), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Montelukast and Petrolatum have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and lung, and related phenotypes are hematopoietic system and digestive/alimentary. A condition characterized by predisposition to develop hypersensitivity reactions. Atopic individuals can develop eczema, allergic rhinitis and allergic asthma.
(http://www.malacards.org/card/atopy)

* Blepharoconjunctivitis is related to angular blepharoconjunctivitis and contact blepharoconjunctivitis. An important gene associated with Blepharoconjunctivitis is IL4 (Interleukin 4), and among its related pathways/superpathways are Allograft rejection

and Matrix Metalloproteinases. The drugs Loteprednol and Tobramycin have been mentioned in the context of this disorder. Affiliated tissues include eye, t cells and testes. A blepharitis that is characterized by the dual combination of conjunctivitis with blepharitis.
(http://www.malacards.org/card/blepharoconjunctivitis)

* Common Cold, also known as acute nasopharyngitis [common cold], is related to myocardial infarction and asthma, and has symptoms including coughing, fever and pruritus. An important gene associated with Common Cold is CCL11 (C-C Motif Chemokine Ligand 11), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Montelukast and Ethanol have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and bone, and related phenotypes are hematopoietic system and homeostasis/metabolism. An upper respiratory tract disease which involves inflammation of the mucous membranes of the nose, throat, eyes, and eustachian tubes with watery then purulent discharge. This is an acute contagious disease caused by rhinoviruses, human parainfluenza viruses, human respiratory syncytial virus, influenza viruses, adenoviruses, enteroviruses, or metapneumovirus.
(http://www.malacards.org/card/common_cold)

* Demyelinating Disease, also known as demyelinating diseases, is related to tumefactive multiple sclerosis and charcot-marie-tooth disease. An important gene associated with Demyelinating Disease is MBP (Myelin Basic Protein), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Natalizumab and Mitoxantrone have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and bone, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and hematopoietic system. A demyelinating disease is any disease of the nervous system in which the myelin sheath of neurons is damaged. This damage impairs the conduction of signals in the affected nerves. In turn, the reduction in conduction ability causes deficiency in sensation, movement, cognition, or other functions depending on which nerves are involved.
(http://www.malacards.org/card/demyelinating_disease)

* Dermatitis, also known as eczema, is related to asthma and exogenous ochronosis, and has symptoms including exanthema and pruritus. An important gene associated with Dermatitis is FLG (Filaggrin), and among its related pathways/superpathways are Cytokine Signaling in Immune system and IL-17 Family Signaling Pathways. The drugs Montelukast and Petrolatum have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and breast, and related phenotypes are Increased shRNA abundance (Z-score > 2) and immune system. A skin disease characterized by itchy, erythematous, vesicular, weeping and crusting patches of skin.
(http://www.malacards.org/card/dermatitis)

* Hyperglycemia is related to diabetes mellitus, permanent neonatal and diabetes mellitus, transient neonatal, 3, and has symptoms including cachexia, cyanosis and dyspnea. An important gene associated with Hyperglycemia is INS (Insulin), and among

its related pathways/superpathways are Developmental Biology and AMP-activated Protein Kinase (AMPK) Signaling. The drugs Glipizide and Metformin have been mentioned in the context of this disorder. Affiliated tissues include endothelial, heart and testes, and related phenotypes are homeostasis/metabolism and growth/size/body region. Hyperglycemia, or high blood sugar is a condition in which an excessive amount of glucose circulates in the blood plasma.
(http://www.malacards.org/card/common_hyperglycemia)

* Intestinal Disease, also known as intestinal diseases, is related to short bowel syndrome and cyclosporiasis, and has symptoms including anal or rectal pain, constipation and diarrhea. An important gene associated with Intestinal Disease is TP53 (Tumor Protein P53), and among its related pathways/superpathways are Akt Signaling and Toll-Like receptor Signaling Pathways. The drugs Infliximab and Benzocaine have been mentioned in the context of this disorder. Affiliated tissues include colon, liver and testes, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and homeostasis/metabolism. A gastrointestinal system disease that is located in the intestine.
(http://www.malacards.org/card/intestinal_disease)

* Lymph Node Disease, also known as disorder of lymph node, is related to supranuclear ocular palsy and kleptomania, and has symptoms including axillary lymph node pain, inguinal lymph node pain and inguinal lymph node tenderness. An important gene associated with Lymph Node Disease is MMP3 (Matrix Metallopeptidase 3), and among its related pathways/superpathways are T cell receptor signaling pathway and IL-17 Family Signaling Pathways. The drugs Azithromycin and Prednisone have been mentioned in the context of this disorder. Affiliated tissues include lymph node, breast and prostate, and related phenotypes are homeostasis/metabolism and endocrine/exocrine gland. Lymphadenopathy or adenopathy is disease of the lymph nodes, in which they are abnormal in size, number, or consistency. Lymphadenopathy of an inflammatory type (the most common type) is lymphadenitis, producing swollen or enlarged lymph nodes.
(http://www.malacards.org/card/lymph_node_disease)

* Movement Disease, also known as movement disorders, is related to cervical dystonia and stereotypic movement disorder, and has symptoms including ataxia, athetosis and back pain. An important gene associated with Movement Disease is TOR1A (Torsin Family 1 Member A), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Chks in Checkpoint Regulation. The drugs Donepezil and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, eye and heart, and related phenotypes are behavior/neurological and cellular. Clinical syndromes with either an excess of movement or a paucity of voluntary and involuntary movements, unrelated to weakness or spasticity.
(http://www.malacards.org/card/movement_disease)

* Multiple Sclerosis, Disease Progression, Modifier of, also known as multiple sclerosis,

is related to progressive relapsing multiple sclerosis and dysphagia, and has symptoms including spasticity, diplopia and emotional lability. An important gene associated with Multiple Sclerosis, Disease Progression, Modifier of is HLA-DRB1 (Major Histocompatibility Complex, Class II, DR Beta 1), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. Affiliated tissues include Neural Tube and Limb, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and hematopoietic system. A demyelinating disease that involves damage to the fatty myelin sheaths around the axons of the brain and spinal cord resulting in demyelination and scarring.
(http://www.malacards.org/card/multiple_sclerosis_disease_progression_modifier_of)

* Narcissistic Personality Disorder is related to personality disorder and glycoproteinosis. An important gene associated with Narcissistic Personality Disorder is SMPD1 (Sphingomyelin Phosphodiesterase 1), and among its related pathways/superpathways are Prolactin Signaling Pathway and Salmonella infection (KEGG). The drug Silicon has been mentioned in the context of this disorder. Affiliated tissues include brain, and related phenotype is growth/size/body region. A personality disorder that involves an excessive preoccupation with issues of personal adequacy, power, prestige and vanity.
(http://www.malacards.org/card/narcissistic_personality_disorder)

* Neuromuscular Junction Disease, also known as neuromuscular junction diseases, is related to lambert-eaton myasthenic syndrome and congenital myasthenic syndrome. An important gene associated with Neuromuscular Junction Disease is MUSK (Muscle Associated Receptor Tyrosine Kinase), and among its related pathways/superpathways are Transmission across Chemical Synapses and ECM proteoglycans. The drugs Azathioprine and Benzocaine have been mentioned in the context of this disorder. Affiliated tissues include testes and thymus, and related phenotypes are mortality/aging and behavior/neurological. A neuromuscular disease that is characterized by the disfunction of conduction through the neuromuscular junction.
(http://www.malacards.org/card/neuromuscular_junction_disease)

* Obesity, also known as obesity, autosomal dominant, is related to obesity susceptibility, enpp1-related and obesity susceptibility, ghrl-related, and has symptoms including hypertriglyceridemia, hyperinsulinemia and hypertension. An important gene associated with Obesity is MC4R (Melanocortin 4 Receptor), and among its related pathways/superpathways are DAG and IP3 signaling and Circadian rythm related genes. The drugs Dexmedetomidine and Acetaminophen have been mentioned in the context of this disorder. Affiliated tissues include liver, ovary and heart, and related phenotypes are adipose tissue and growth/size/body region. A condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat.
(http://www.malacards.org/card/obesity)

* Palmoplantar Keratosis, also known as palmoplantar keratoderma, is related to keratoderma, palmoplantar, with deafness and palmoplantar keratoderma,

epidermolytic. An important gene associated with Palmoplantar Keratosis is CTSC (Cathepsin C), and among its related pathways/superpathways are Developmental Biology and Keratinization. The drugs Etanercept and Analgesics have been mentioned in the context of this disorder. Affiliated tissues include skin, and related phenotype is integument. A keratosis characterized by abnormal thickening of the palms and the soles.
(http://www.malacards.org/card/palmoplantar_keratosis)

* Paranoid Schizophrenia, also known as chronic paranoid schizophrenia, is related to ulcerative colitis and personality disorder. An important gene associated with Paranoid Schizophrenia is COMT (Catechol-O-Methyltransferase), and among its related pathways/superpathways are Amphetamine addiction and Serotonergic synapse. The drugs Dopamine and Risperidone have been mentioned in the context of this disorder. Affiliated tissues include testes, brain and eye, and related phenotypes are behavior/neurological and nervous system. A schizophrenia that involves delusions or auditory hallucinations of persecution or being plotted against without thought disorder, disorganized behavior, or affective flattening.
(http://www.malacards.org/card/paranoid_schizophrenia)

* Pulmonary Emphysema is related to berry aneurysm, cirrhosis, pulmonary emphysema, and cerebral calcification and alpha 1-antitrypsin deficiency, and has symptoms including coughing, hemoptysis and snoring. An important gene associated with Pulmonary Emphysema is SERPINA1 (Serpin Family A Member 1), and among its related pathways/superpathways are Innate Immune System and Integrin Pathway. The drugs Simvastatin and Doxycycline have been mentioned in the context of this disorder. Affiliated tissues include lung, bone and liver, and related phenotypes are homeostasis/metabolism and hematopoietic system. A long-term, progressive disease of the lungs that primarily causes shortness of breath due to over-inflation of the alveoli (air sacs in the lung). In people with emphysema, the lung tissue involved in exchange of gases (oxygen and carbon dioxide) is impaired or destroyed.
(http://www.malacards.org/card/pulmonary_emphysema)

* Radioulnar Synostosis, also known as congenital radioulnar synostosis, is related to radioulnar synostosis with amegakaryocytic thrombocytopenia 2 and radioulnar synostosis with amegakaryocytic thrombocytopenia 1, and has symptoms including limited elbow extension and dislocated radial head. An important gene associated with Radioulnar Synostosis is MECOM (MDS1 And EVI1 Complex Locus), and among its related pathways/superpathways are MAPK signaling pathway and Pathways in cancer. Affiliated tissues include bone, bone marrow and brain, and related phenotypes are Condensed cis-Golgi and cellular. Congenital radioulnar synostosis is rare. Post-traumatic cases are most likely to develop following surgery for a forearm fracture, this is more common with high-energy injuries where the bones are broken into many pieces (comminuted). It can also develop following soft tissue injury to the forearm where there is haematoma formation.
(http://www.malacards.org/card/radioulnar_synostosis)

* Root Resorption is related to singleton-merten syndrome 1 and prothrombin thrombophilia. An important gene associated with Root Resorption is TNFSF11 (TNF Superfamily Member 11), and among its related pathways/superpathways are Cytokine Signaling in Immune system and Development Endothelin-1/EDNRA signaling. The drugs Mitogens and Chlorhexidine have been mentioned in the context of this disorder. Affiliated tissues include bone and thyroid, and related phenotypes are hematopoietic system and homeostasis/metabolism. A process by which all or part of a tooth structure is lost due to activation of the body's innate capacity to remove mineralized tissue, as mediated via cells such as osteoclasts.
(http://www.malacards.org/card/root_resorption)

* Spondyloarthropathy 1, also known as ankylosing spondylitis, is related to osteochondrosis and uveitis, and has symptoms including kyphosis, back pain and arrhythmia. An important gene associated with Spondyloarthropathy 1 is HLA-B (Major Histocompatibility Complex, Class I, B), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Etanercept and Methotrexate have been mentioned in the context of this disorder. Affiliated tissues include Placenta and Umbilical Cord, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and hematopoietic system. Ankylosing spondylitis is a form of ongoing joint inflammation (chronic inflammatory arthritis) that primarily affects the spine. This condition is characterized by back pain and stiffness that typically appear in adolescence or early adulthood. Over time, back movement gradually becomes limited as the bones of the spine (vertebrae) fuse together.
(http://www.malacards.org/card/spondyloarthropathy_1)

* Telogen Effluvium is related to alopecia and alopecia areata. An important gene associated with Telogen Effluvium is LIPH (Lipase H), and among its related pathways/superpathways are Cell adhesion molecules (CAMs) and Presenilin-Mediated Signaling. The drugs Adjuvants, Immunologic and Ammonium trichloro(dioxoethylene-O,O'-)tellurate have been mentioned in the context of this disorder. Affiliated tissues include skin, thyroid and spinal cord. A scalp disorder characterized by the thinning or shedding of hair resulting from the early entry of hair in the telogen phase (the resting phase of the hair follicle).
(http://www.malacards.org/card/telogen_effluvium)

* Tendinopathy is related to tendinitis and tendinosis, and has symptoms including muscle cramp, muscle rigidity and muscle spasticity. An important gene associated with Tendinopathy is ENPP1 (Ectonucleotide Pyrophosphatase/Phosphodiesterase 1), and among its related pathways/superpathways are Integrin Pathway and Degradation of the extracellular matrix. The drugs Lidocaine and Polidocanol have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, bone and whole blood, and related phenotype is homeostasis/metabolism. A disease of a tendon.
(http://www.malacards.org/card/tendinopathy)

* Tendinosis is related to tendinitis and colobomatous microphthalmia. An important gene associated with Tendinosis is CHAT (Choline O-Acetyltransferase), and among its

related pathways/superpathways are PAK Pathway and Degradation of the extracellular matrix. The drugs Menthol and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include skin, whole blood and bone, and related phenotypes are homeostasis/metabolism and behavior/neurological. A damage to a tendon at a cellular level (the suffix "osis" implies a pathology of chronic degeneration without inflammation).
(http://www.malacards.org/card/tendinosis)

* Tooth Resorption is related to internal hordeolum and cortical blindness, and has symptoms including toothache An important gene associated with Tooth Resorption is DSPP (Dentin Sialophosphoprotein), and among its related pathways/superpathways are Degradation of the extracellular matrix and RANK Signaling in Osteoclasts. The drugs sodium fluoride and Denosumab have been mentioned in the context of this disorder. Affiliated tissues include bone and myeloid, and related phenotypes are craniofacial and hematopoietic system. A process by which all or part of a tooth structure is lost due to activation of the body's innate capacity to remove mineralized tissue, as mediated via cells such as osteoclasts.
(http://www.malacards.org/card/tooth_resorption)

* Withdrawal Disorder, also known as substance withdrawal syndrome, is related to barbiturate dependence and hole retinal cyst, and has symptoms including seizures, drug withdrawal symptoms and withdrawal symptoms. An important gene associated with Withdrawal Disorder is KLK3 (Kallikrein Related Peptidase 3), and among its related pathways/superpathways are Peptide ligand-binding receptors and G alpha (s) signalling events. The drugs Everolimus and Miconazole have been mentioned in the context of this disorder. Affiliated tissues include lung, kidney and prostate, and related phenotypes are behavior/neurological and homeostasis/metabolism. A substance-related disorder that occurs upon the abrupt discontinuation/separation or a decrease in dosage of the intake of medications, recreational drugs, and alcohol.
(http://www.malacards.org/card/withdrawal_disorder)

1.3.2.8 RT-MB-33

https://archive.org/details/Resonant_Therapy-Molecular_Biology_33

Genetic Superpathways-Acromegaly, Genetic Superpathways-Aging P1, Genetic Superpathways-Aging P2, Genetic Superpathways-Alexithymia, Genetic Superpathways-Alveolar Periostitis, Genetic Superpathways-Antisocial Personality Disorder, Genetic Superpathways-Apnea Obstructive Sleep, Genetic Superpathways-Attention Deficit Hyperactivity Disorder, Genetic Superpathways-Bone Inflammation Disease, Genetic Superpathways-Calcific Tendinitis, Genetic Superpathways-Dental Abscess, Genetic Superpathways-Dental Pulp Disease, Genetic Superpathways-Frozen Shoulder, Genetic Superpathways-Impotence, Genetic Superpathways-Keratosis Seborrheic Somatic, Genetic Superpathways-Morbid Obesity, Genetic Superpathways-Necrotizing Ulcerative Gingivitis, Genetic Superpathways-Neuritis, Genetic

Superpathways-Obesity Hypoventilation Syndrome, Genetic Superpathways-Overnutrition, Genetic Superpathwys-Peptic Ulcer Disease, Genetic Superpathways-Periodontitis Chronic, Genetic Superpathways-Pituitary Adenoma Growth Hormone Secreting, Genetic Superpathways-Prediabetes Syndrome, Genetic Superpathways-Sinusitis, Genetic Superpathways-Social Phobia, Genetic Superpathways-Specific Bursitis, Genetic Superpathways-Tooth Erosion, Genetic Superpathways-Vasomotor Rhinitis, Genetics-Rhinosporidiosis

* Acromegaly, also known as growth hormone excess, is related to functioning pituitary adenoma and pituitary adenoma, prolactin-secreting, and has symptoms including macroglossia, acne and broad jaw. An important gene associated with Acromegaly is AIP (Aryl Hydrocarbon Receptor Interacting Protein), and among its related pathways/superpathways are TGF-Beta Pathway and Peptide ligand-binding receptors. The drugs Octreotide and lanreotide have been mentioned in the context of this disorder. Affiliated tissues include pituitary, bone and testes, and related phenotypes are homeostasis/metabolism and endocrine/exocrine gland. A disease of metabolism that has material basis in excessive growth hormone production which results_in enlargement located in limb.
(http://www.malacards.org/card/acromegaly)

* Aging is related to werner syndrome and atypical werner syndrome. An important gene associated with Aging is LMNA (Lamin A/C), and among its related pathways/superpathways are Endometrial cancer and TNFR1 Pathway. The drugs Acetylcholine and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, bone and heart, and related phenotypes are Decreased viability and Decreased viability. Biological aging is the gradual deterioration of function.
(http://www.malacards.org/card/aging)

* Alexithymia is related to antisocial personality disorder and personality disorder. An important gene associated with Alexithymia is ANKK1 (Ankyrin Repeat And Kinase Domain Containing 1), and among its related pathways/superpathways are cAMP signaling pathway and Selective Serotonin Reuptake Inhibitor Pathway, Pharmacodynamics. The drugs Sertraline and Serotonin have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and breast, and related phenotype is Weakly decreased NFAT1-GFP nuclear translocation. A personality construct characterized by the subclinical inability to identify and describe emotions in the self. The core characteristics of alexithymia are marked dysfunction in emotional awareness, social attachment, and interpersonal relating. Furthermore, people with alexithymia have difficulty in distinguishing and appreciating the emotions of others, which is thought to lead to unempathic and ineffective emotional responding. Alexithymia occurs in approximately 10% of the population and can occur with a number of psychiatric conditions.
(http://www.malacards.org/card/alexithymia)

* Alveolar Periostitis, also known as dry socket, is related to ampulla of vater adenosquamous carcinoma and ectopic cushing syndrome, and has symptoms including oral manifestations An important gene associated with Alveolar Periostitis is SLC9C1 (Solute Carrier Family 9 Member C1), and among its related pathways/superpathways are Hepatitis C and Hepatocellular Carcinoma and Notch-mediated HES/HEY network. The drugs Chlorhexidine and Anti-Infective Agents have been mentioned in the context of this disorder. Related phenotype is liver/biliary system. An inflammation of the alveolar bone (i.e., the alveolar process of the maxilla or mandible). Classically, this occurs as a postoperative complication of tooth extraction. (http://www.malacards.org/card/alveolar_periostitis)

* Antisocial Personality Disorder, also known as psychopathic personality disorder, is related to personality disorder and heroin dependence. An important gene associated with Antisocial Personality Disorder is MAOA (Monoamine Oxidase A), and among its related pathways/superpathways are Transmission across Chemical Synapses and Circadian entrainment. The drugs Naratriptan and Sumatriptan have been mentioned in the context of this disorder. Affiliated tissues include cortex, prefrontal cortex and brain, and related phenotypes are behavior/neurological and homeostasis/metabolism. A personality disorder characterized by a long term pattern of disregard for, or violation of, the rights of others. An impoverished moral sense or conscience is often apparent, as well as a history of crime, legal problems, or impulsive and aggressive behavior. (http://www.malacards.org/card/antisocial_personality_disorder)

* Apnea, Obstructive Sleep, also known as obstructive sleep apnea, is related to kawasaki disease and body mass index quantitative trait locus 11, and has symptoms including snoring, excessive daytime somnolence and anosmia. An important gene associated with Apnea, Obstructive Sleep is AHDC1 (AT-Hook DNA Binding Motif Containing 1), and among its related pathways/superpathways are Common Cytokine Receptor Gamma-Chain Family Signaling Pathways and Selenium Micronutrient Network. The drugs Guanfacine and Hydrochlorothiazide have been mentioned in the context of this disorder. Affiliated tissues include heart, testes and endothelial, and related phenotypes are cardiovascular system and behavior/neurological. A sleep apnea that is characterized by repeated collapse and obstruction of the upper airway during sleep, which results in reduced airflow (hypopnea) or complete airflow cessation (apnea), oxygen desaturation, and arousals from sleep. (http://www.malacards.org/card/apnea_obstructive_sleep)

* Attention Deficit-Hyperactivity Disorder, also known as attention deficit hyperactivity disorder, is related to gilles de la tourette syndrome and conduct disorder, and has symptoms including attention deficit hyperactivity disorder, hyperactivity and sleeplessness. An important gene associated with Attention Deficit-Hyperactivity Disorder is DRD4 (Dopamine Receptor D4), and among its related pathways/superpathways are Dopaminergic synapse and Serotonergic synapse. The drugs Dopamine and Methylphenidate have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and thyroid, and related phenotypes are behavior/neurological and nervous system. A mental disorder in which children are

especially inattentive, impulsive or hyperactive.
(http://www.malacards.org/card/attention_deficit_hyperactivity_disorder_2)

* Bone Inflammation Disease, also known as osteitis, is related to osteomyelitis and arthropathy. An important gene associated with Bone Inflammation Disease is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways/superpathways are Innate Immune System and Akt Signaling. Affiliated tissues include bone and bone, and related phenotypes are homeostasis/metabolism and cellular. A bone disease that results_in inflammation of the located in bone.
(http://www.malacards.org/card/bone_inflammation_disease)

* Calcific Tendinitis is related to tendinitis and episodic pain syndrome, familial, 1. An important gene associated with Calcific Tendinitis is SPP1 (Secreted Phosphoprotein 1), and among its related pathways/superpathways are Toll-like receptor signaling pathway and Lysosome. The drugs Triamcinolone and Epinephrine have been mentioned in the context of this disorder. Affiliated tissues include bone, pituitary and hypothalamus, and related phenotypes are hematopoietic system and immune system. A disorder characterized by deposits of hydroxyapatite (a crystalline calcium phosphate) in any tendon of the body.
(http://www.malacards.org/card/calcific_tendinitis)

* Dental Abscess is related to osteopetrosis, autosomal dominant 2 and osteopetrosis, autosomal dominant 1. An important gene associated with Dental Abscess is PHEX (Phosphate Regulating Endopeptidase Homolog, X-Linked), and among its related pathways/superpathways is Neuroscience. The drugs Amoxicillin and Clindamycin have been mentioned in the context of this disorder. Affiliated tissues include lung. A tooth disease characterized by a localized collection of pus associated with a tooth.
(http://www.malacards.org/card/dental_abscess)

* Dental Pulp Disease, also known as dental pulp diseases, is related to insensitivity to pain, congenital and cutaneous porphyria, and has symptoms including toothache An important gene associated with Dental Pulp Disease is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways/superpathways are Bacterial infections in CF airways and Immune response IFN alpha/beta signaling pathway. The drugs Epinephrine and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include testes, bone and eye.
(http://www.malacards.org/card/dental_pulp_disease)

* Frozen Shoulder, also known as bursitis, is related to olecranon bursitis and bursitis, and has symptoms including bursal tenderness, bursal pain and myalgia. An important gene associated with Frozen Shoulder is ASIC3 (Acid Sensing Ion Channel Subunit 3), and among its related pathways/superpathways are Ion channel transport and Development Endothelin-1/EDNRA signaling. The drugs Prednisolone and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include testes, bone and endothelial, and related phenotypes are behavior/neurological and nervous

system. A painful and disabling disorder of unclear cause in which the shoulder capsule, the connective tissue surrounding the glenohumeral joint of the shoulder, becomes inflamed and stiff, greatly restricting motion and causing chronic pain.
(http://www.malacards.org/card/frozen_shoulder)

* Impotence, also known as erectile dysfunction, is related to vasculogenic impotence and gynecomastia, and has symptoms including unable to perform sex, inability to maintain erection and equilibration disorder. An important gene associated with Impotence is NOS1 (Nitric Oxide Synthase 1), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Relaxin signaling pathway. The drugs Methyltestosterone and Testosterone have been mentioned in the context of this disorder. Affiliated tissues include prostate, spinal cord and bone, and related phenotype is reproductive system. A common type of male sexual dysfunction. It is when a man has trouble getting or keeping an erection. ED becomes more common as you get older. But it's not a natural part of aging.
(http://www.malacards.org/card/impotence)

* Keratosis, Seborrheic, Somatic, also known as seborrheic keratosis, is related to vulvar seborrheic keratosis and inflamed seborrheic keratosis, and has symptoms including verrucae An important gene associated with Keratosis, Seborrheic, Somatic is PIK3CA (Phosphatidylinositol-4,5-Bisphosphate 3-Kinase Catalytic Subunit Alpha), and among its related pathways/superpathways are Developmental Biology and Development HGF signaling pathway. Affiliated tissues include skin, and related phenotypes are Decreased shRNA abundance (Z-score < -2) and growth/size/body region. A benign (non cancerous) tumor found on the skin. seborrheic keratoses are the most common benign tumor in older individuals. they usually appear as multiple small, flat or raised growths that range in color from white to black and are commonly found on the face, neck, chest, shoulders, and hands.
(http://www.malacards.org/card/keratosis_seborrheic_somatic)

* Morbid Obesity, also known as obesity, morbid, is related to body mass index quantitative trait locus 14 and body mass index quantitative trait locus 9, and has symptoms including obesity, metabolically benign An important gene associated with Morbid Obesity is PPARG (Peroxisome Proliferator Activated Receptor Gamma), and among its related pathways/superpathways are Peptide ligand-binding receptors and Glucose / Energy Metabolism. The drugs Dexmedetomidine and Hydroxocobalamin have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and bone, and related phenotypes are adipose tissue and homeostasis/metabolism. A clinically severe obesity.
(http://www.malacards.org/card/morbid_obesity)

* Necrotizing Ulcerative Gingivitis, also known as acute necrotizing ulcerative gingivitis, is related to gingivitis and hypogonadotropic hypogonadism 16 with or without anosmia. An important gene associated with Necrotizing Ulcerative Gingivitis is GUSB (Glucuronidase Beta), and among its related pathways/superpathways are Staphylococcus aureus infection and B Cell Development Pathways. The drugs Folic

Acid and Micronutrients have been mentioned in the context of this disorder. Affiliated tissues include bone, and related phenotypes are hematopoietic system and immune system. Also known as trench mouth, is a common, non-contagious infection of the gums with sudden onset. The main features are painful, bleeding gums, and ulceration of inter-dental papillae (the sections of gum between adjacent teeth).
(http://www.malacards.org/card/necrotizing_ulcerative_gingivitis)

* Neuritis, also known as peripheral neuritis, is related to optic neuritis and neuromyelitis optica, and has symptoms including sciatica and neuralgia. An important gene associated with Neuritis is PMP2 (Peripheral Myelin Protein 2), and among its related pathways/superpathways are Cytokine Signaling in Immune system and PAK Pathway. The drugs Methylprednisolone and Prednisolone have been mentioned in the context of this disorder. Affiliated tissues include eye, brain and t cells, and related phenotypes are hematopoietic system and behavior/neurological. Neuritis is inflammation of a nerve or the general inflammation of the peripheral nervous system.
(http://www.malacards.org/card/neuritis)

* Obesity-Hypoventilation Syndrome, also known as obesity hypoventilation syndrome, is related to sleep apnea and apnea, obstructive sleep, and has symptoms including cyanosis, excessive daytime somnolence and obesity. An important gene associated with Obesity-Hypoventilation Syndrome is LEP (Leptin), and among its related pathways/superpathways are Common Cytokine Receptor Gamma-Chain Family Signaling Pathways and Circadian rythm related genes. The drugs Acetazolamide and Anticonvulsants have been mentioned in the context of this disorder. Affiliated tissues include heart and endothelial, and related phenotypes are adipose tissue and liver/biliary system. A breathing disorder that affects some obese people. In OHS, poor breathing results in too much carbon dioxide (hypoventilation) and too little oxygen in the blood (hypoxemia).OHS sometimes is called Pickwickian syndrome.
(http://www.malacards.org/card/obesity_hypoventilation_syndrome)

* Overnutrition is related to nutritional deficiency disease and body mass index quantitative trait locus 14. An important gene associated with Overnutrition is LEP (Leptin), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Common Cytokine Receptor Gamma-Chain Family Signaling Pathways. The drugs Aspirin and Moxonidine have been mentioned in the context of this disorder. Affiliated tissues include liver, brain and heart, and related phenotypes are homeostasis/metabolism and adipose tissue. A form of malnutrition in which the intake of nutrients is oversupplied. The amount of nutrients exceeds the amount required for normal growth, development, and metabolism.
(http://www.malacards.org/card/overnutrition)

* Peptic Ulcer Disease, also known as peptic ulcer, is related to active peptic ulcer disease and peptic ulcer perforation, and has symptoms including gastrointestinal gas, signs and symptoms, digestive and nausea and vomiting. An important gene associated with Peptic Ulcer Disease is HRH2 (Histamine Receptor H2), and among its related

pathways/superpathways are Antiulcer drugs and Cytokine Signaling in Immune system. The drugs Aspirin and Pantoprazole have been mentioned in the context of this disorder. Affiliated tissues include testes, small intestine and kidney, and related phenotypes are digestive/alimentary and endocrine/exocrine gland. A break in the lining of the stomach, first part of the small intestine or occasionally the lower esophagus.
(http://www.malacards.org/card/peptic_ulcer_disease)

* Periodontitis, Chronic, also known as chronic periodontitis, is related to chronic apical periodontitis and periodontitis, and has symptoms including gingivitis and periodontitis. An important gene associated with Periodontitis, Chronic is MMP8 (Matrix Metallopeptidase 8), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs sodium fluoride and Epinephrine have been mentioned in the context of this disorder. Affiliated tissues include bone, ovary and liver, and related phenotypes are immune system and neoplasm. This is the most frequently occurring form of periodontitis and is characterized by slowly progressing alveolar bone destruction and attachment loss. Although chronic periodontitis is most prevalent in adults and has a slow progression, it can occur in children and adolescents and may have periods of rapid progression.
(http://www.malacards.org/card/periodontitis_chronic)

* Pituitary Adenoma, Growth Hormone-Secreting, also known as growth hormone secreting pituitary adenoma, is related to pituitary adenoma, acth-secreting and usher syndrome, type 1f, and has symptoms including coarse facial features, frontal bossing and hypertrophic cardiomyopathy. An important gene associated with Pituitary Adenoma, Growth Hormone-Secreting is AIP (Aryl Hydrocarbon Receptor Interacting Protein), and among its related pathways/superpathways are PI3K-Akt signaling pathway and G-protein signaling_RhoA regulation pathway. The drugs Octreotide and Hormones have been mentioned in the context of this disorder. Affiliated tissues include pituitary and thyroid. A benign pituitary gland tumor that leads to the production of too much growth hormone, resulting in acromegaly.
(http://www.malacards.org/card/pituitary_adenoma_growth_hormone_secreting)

* Prediabetes Syndrome, also known as prediabetic state, is related to nonalcoholic steatohepatitis and fatty liver disease. An important gene associated with Prediabetes Syndrome is INS (Insulin), and among its related pathways/superpathways are Glucose / Energy Metabolism and AMP-activated Protein Kinase (AMPK) Signaling. The drugs Ethanol and Heparin have been mentioned in the context of this disorder. Affiliated tissues include testes, heart and kidney, and related phenotypes are homeostasis/metabolism and growth/size/body region. The precursor stage before diabetes mellitus in which not all of the symptoms required to diagnose diabetes are present, but blood sugar is abnormally high.
(http://www.malacards.org/card/prediabetes_syndrome)

* Rhinosporidiosis, also known as infection by rhinosporidium seeberi, is related to laryngitis and chronic rhinitis. An important gene associated with Rhinosporidiosis is DCXR (Dicarbonyl And L-Xylulose Reductase), and among its related

pathways/superpathways are NF-kappaB Signaling and Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include eye, skin and trachea. A parasitic Ichthyosporea infectious disease that is a chronic granulomatous infection of the mucous membranes caused by the parasite Rhinosporidium seeberi, which manifests as vascular friable polyps that arise from the nasal mucosa or external structures of the eye.
(http://www.malacards.org/card/rhinosporidiosis)

* Sinusitis is related to common cold and cystic fibrosis, and has symptoms including equilibration disorder, vertigo/dizziness and sore throat. An important gene associated with Sinusitis is IL4R (Interleukin 4 Receptor), and among its related pathways/superpathways are PEDF Induced Signaling and Akt Signaling. The drugs Augmentin and Avelox I.V. have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and skin, and related phenotypes are digestive/alimentary and immune system. An inflammation of the sinuses resulting in symptoms. Common symptoms include thick nasal mucus, a plugged nose, and pain in the face. Other signs and symptoms may include fever, headaches, poor sense of smell, sore throat, and cough.
(http://www.malacards.org/card/sinusitis)

* Social Phobia, also known as phobic anxiety disorder, is related to phobic disorder and agoraphobia. An important gene associated with Social Phobia is MAOA (Monoamine Oxidase A), and among its related pathways/superpathways are Sudden Infant Death Syndrome (SIDS) Susceptibility Pathways and Serotonergic synapse. The drugs Norepinephrine and Citalopram have been mentioned in the context of this disorder. Affiliated tissues include brain, amygdala and testes, and related phenotypes are behavior/neurological and endocrine/exocrine gland. A phobic disorder that involves social anxiety occurring only in specific public or social situations, interactions with others or being evaluated or scrutinized by other people.
(http://www.malacards.org/card/social_phobia)

* Specific Bursitis Often of Occupational Origin, also known as specific bursitides often of occupational origin, is related to cervical adenitis and byssinosis. An important gene associated with Specific Bursitis Often of Occupational Origin is SERPINI2 (Serpin Family I Member 2), and among its related pathways/superpathways are Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers and Dendritic Cells Developmental Lineage Pathway. Affiliated tissues include bone.
(http://www.malacards.org/card/specific_bursitis_often_of_occupational_origin)

* Tooth Erosion, also known as generalized erosions, is related to congenital erosive and vesicular dermatosis and diaphragmatic eventration. An important gene associated with Tooth Erosion is GPI (Glucose-6-Phosphate Isomerase), and among its related pathways/superpathways are BRCA1 Pathway and Transcription Ligand-dependent activation of the ESR1/SP pathway. The drugs sodium fluoride and Anti-Infective Agents have been mentioned in the context of this disorder. Affiliated tissues include testes, bone and heart. Acid erosion, also known as dental erosion, is a type of tooth wear. It is

defined as the irreversible loss of tooth structure due to chemical dissolution by acids not of bacterial origin.
(http://www.malacards.org/card/tooth_erosion)

* Vasomotor Rhinitis, also known as rhinitis, vasomotor, is related to asthma and rhinitis. An important gene associated with Vasomotor Rhinitis is VIP (Vasoactive Intestinal Peptide), and among its related pathways/superpathways are IgA-Producing B Cells in the Intestine and Malaria. The drugs Azelastine and Histamine have been mentioned in the context of this disorder. Affiliated tissues include heart. A rhinitis which involves a hypersensitive reaction to various potentially irritating stimuli such as changes in weather, temperature, or barometric pressure, chemical irritants such as smoke, ozone, pollution, perfumes, and aerosol sprays, psychological stress and emotional shocks, medications, alcohol, and spicy food.
(http://www.malacards.org/card/vasomotor_rhinitis)

1.3.2.9 RT-MB-34

https://archive.org/details/Resonant_Therapy-Molecular_Biology_34

Genetic Superpathways-Adult Onset Myasthenia Gravis; Genetic Superpathways-Amyotrophic Lateral Sclerosis1; Genetic Superpathways-Burning Mouth Syndrome; Genetic Superpathways-Burns; Genetic Superpathways-Carbuncle; Genetic Superpathways-Cardiac Arrest; Genetic Superpathways-Central Nervous System Disease; Genetic Superpathways-Cerebellar Disease; Genetic Superpathways-Constipation; Genetic Superpathways-Hair Morphology1; Genetic Superpathways-Hemorrhage Intracerebral; Genetic Superpathways-Hypertension Essential; Genetic Superpathways-Hypotonia; Genetic Superpathways-Hypotrichosis; Genetic Superpathways-Lentigines; Genetic Superpathways-Motor Neuron Disease; Genetic Superpathways-Myocardial Infarction; Genetic Superpathways-Myopathy; Genetic Superpathways-Oral Candidiasis; Genetic Superpathways-Peripheral Artery Disease; Genetic Superpathways-Peripheral Nervous System Disease; Genetic Superpathways-Pollen Allergy; Genetic Superpathways-Post Traumatic Stress Disorder; Genetic Superpathways-Prostatic Hyperplasia Benign; Genetic Superpathways-Psychosexual Disorder; Genetic Superpathways-Pulmonary Fibrosis Idiopathic; Genetic Superpathways-Sleep Disorder; Genetic Superpathways-Stroke Ischemic; Genetic Superpathways-Tetanus Disease; Genetic Superpathways-Trigeminal Neuralgia

* Adult-Onset Myasthenia Gravis, also known as adult-onset autoimmune myasthenia gravis, is related to myasthenia gravis and myasthenia gravis congenital. An important gene associated with Adult-Onset Myasthenia Gravis is TNFRSF11A (TNF Receptor Superfamily Member 11a), and among its related pathways/superpathways are NF-kappaB Signaling and ICos-ICosL Pathway in T-Helper Cell. Related phenotypes are Increased number of mitotic cells and endocrine/exocrine gland. A long-term

neuromuscular disease that leads to varying degrees of skeletal muscle weakness. The most commonly affected muscles are those of the eyes, face, and swallowing.
(https://www.malacards.org/card/adult_onset_myasthenia_gravis)

* Amyotrophic Lateral Sclerosis 1, also known as amyotrophic lateral sclerosis, is related to frontotemporal dementia and/or amyotrophic lateral sclerosis 1 and motor neuron disease, and has symptoms including back pain, headache and pain. An important gene associated with Amyotrophic Lateral Sclerosis 1 is SOD1 (Superoxide Dismutase 1), and among its related pathways/superpathways are Amyotrophic lateral sclerosis (ALS) and Neuroscience. The drugs Riluzole and Mexiletine have been mentioned in the context of this disorder. Affiliated tissues include Bone and Limb, and related phenotypes are emotional lability and depressivity. A motor neuron disease that is characterized by muscle spasticity, rapidly progressive weakness due to muscle atrophy, difficulty in speaking, swallowing, and breathing.
(https://www.malacards.org/card/amyotrophic_lateral_sclerosis_1)

* Burning Mouth Syndrome, also known as stomatodynia, is related to trigeminal neuralgia and autonomic nervous system disease, and has symptoms including oral manifestations An important gene associated with Burning Mouth Syndrome is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways/superpathways are PI3K-Akt signaling pathway and Regulation of IFNA signaling. The drugs Clonazepam and GABA Agents have been mentioned in the context of this disorder. Affiliated tissues include tongue, testes and brain, and related phenotypes are behavior/neurological and cardiovascular system. Burning mouth syndrome is characterized by long-lasting burning sensations of the mouth. The pain may affect the tongue, gums, lips, palate, throat, or the entire mouth.
(https://www.malacards.org/card/burning_mouth_syndrome)

* Burns is related to glossitis and vulvar vestibulitis syndrome. An important gene associated with Burns is TTR (Transthyretin), and among its related pathways/superpathways are Aldosterone synthesis and secretion and MAPK signaling pathway. The drugs silver nitrate and Bacitracin have been mentioned in the context of this disorder. Affiliated tissues include Umbilical Cord, skin and eye, and related phenotypes are Increased cell death in breast cancer cell lines (MCF10A, MDA-MB-435) and hematopoietic system. A burn is damage to your body's tissues caused by heat, chemicals, electricity, sunlight, or radiation. Scalds from hot liquids and steam, building fires and flammable liquids and gases are the most common causes of burns. Another kind is an inhalation injury, caused by breathing smoke.
(https://www.malacards.org/card/burns)

* Carbuncle, also known as carbuncle and furuncle of any part of face except eye, is related to lung cancer and griscelli syndrome, type 1. An important gene associated with Carbuncle is SPAG1 (Sperm Associated Antigen 1), and among its related pathways/superpathways are Apoptotic Pathways in Synovial Fibroblasts and ERK Signaling. The drugs Iodine and Povidone have been mentioned in the context of this disorder. Affiliated tissues include eye, skin and kidney, and related phenotypes are

Decreased substrate adherent cell growth and Decreased substrate adherent cell growth. A painful circumscribed inflammation of the subcutaneous tissue, resulting in suppuration and sloughing, and having a tendency to spread somewhat like a boil, but more serious in its effects.
(https://www.malacards.org/card/carbuncle)

* Cardiac Arrest, also known as cardiopulmonary arrest, is related to arrhythmogenic right ventricular cardiomyopathy and ventricular fibrillation, paroxysmal familial, 1, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Cardiac Arrest is PLN (Phospholamban), and among its related pathways/superpathways are Aldosterone synthesis and secretion and Cardiac conduction. The drugs Clonazepam and Valproic Acid have been mentioned in the context of this disorder. Affiliated tissues include heart, brain and breast, and related phenotypes are behavior/neurological and cardiovascular system. A sudden loss of blood flow resulting from the failure of the heart to effectively pump.
(https://www.malacards.org/card/cardiac_arrest)

* Central Nervous System Disease, also known as central nervous system diseases, is related to meningitis and nervous system disease, and has symptoms including headache, hemiplegia and hyperexplexia. An important gene associated with Central Nervous System Disease is HAR1A (Highly Accelerated Region 1A Dysfunction Pattern:), and among its related pathways/superpathways are Tuberculosis and Bacterial infections in CF airways. The drugs Ritonavir and Propofol have been mentioned in the context of this disorder. Affiliated tissues include brain, spinal cord and testes, and related phenotypes are cellular and homeostasis/metabolism. A nervous system disease that affects either the spinal cord (myelopathy) or brain (encephalopathy) of the central nervous system.
(https://www.malacards.org/card/central_nervous_system_disease)

* Cerebellar Disease, also known as cerebellar diseases, is related to spinocerebellar ataxia 1 and spinocerebellar ataxia 2, and has symptoms including ataxia, back pain and cerebellar ataxia. An important gene associated with Cerebellar Disease is CACNA1A (Calcium Voltage-Gated Channel Subunit Alpha1 A), and among its related pathways/superpathways are Myometrial Relaxation and Contraction Pathways and Dopamine-DARPP32 Feedback onto cAMP Pathway. The drugs Clonidine and Estradiol have been mentioned in the context of this disorder. Affiliated tissues include cerebellum, brain and liver, and related phenotypes are behavior/neurological and nervous system. Damage to the cerebellum often causes motor-related symptoms, the details of which depend on the part of the cerebellum involved and how it is damaged.
(https://www.malacards.org/card/cerebellar_disease)

* Constipation is related to hypoganglionosis and hirschsprung disease 1. An important gene associated with Constipation is RET (Ret Proto-Oncogene), and among its related pathways/superpathways are Signaling by GPCR and Peptide ligand-binding receptors. The drugs Naloxone and Oxycodone have been mentioned in the context of this disorder. Affiliated tissues include lung, colon and breast, and related phenotypes are

Decreased viability and Decreased viability. A bowel dysfunction that is characterized by infrequent or difficult evacuation of feces.
(https://www.malacards.org/card/constipation)

* Hair Morphology 1, also known as hair morphology 1, hair thickness, is related to hypohidrotic ectodermal dysplasia autosomal recessive. An important gene associated with Hair Morphology 1 is EDAR (Ectodysplasin A Receptor), and among its related pathways/superpathways is Cytokine Signaling in Immune system. Related phenotypes are Decreased shRNA abundance (Z-score < -2) and Decreased shRNA abundance (Z-score < -2).
(https://www.malacards.org/card/hair_morphology_1)

* Hemorrhage, Intracerebral, also known as hemorrhage, intracerebral, susceptibility to, is related to cerebral hemorrhage and cerebral amyloid angiopathy, cst3-related, and has symptoms including angina pectoris, back pain and chest pain. An important gene associated with Hemorrhage, Intracerebral is COL4A1 (Collagen Type IV Alpha 1 Chain), and among its related pathways/superpathways are Neuroscience and Binding and Uptake of Ligands by Scavenger Receptors. The drugs Ticlopidine and Clopidogrel have been mentioned in the context of this disorder. Affiliated tissues include brain, cortex and eye, and related phenotypes are cardiovascular system and growth/size/body region. A stroke is a medical emergency. There are two types - ischemic and hemorrhagic. Hemorrhagic stroke is the less common type. It happens when a blood vessel breaks and bleeds into the brain.
(https://www.malacards.org/card/hemorrhage_intracerebral)

* Hypertension, Essential, also known as essential hypertension, is related to arteries, anomalies of and coronary artery anomaly, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Hypertension, Essential is PTGIS (Prostaglandin I2 Synthase), and among its related pathways/superpathways are AGE-RAGE signaling pathway in diabetic complications and Corticotropin-releasing hormone signaling pathway. The drugs Adcirca and Adempas have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and kidney, and related phenotypes are elevated systolic blood pressure and elevated diastolic blood pressure. A hypertension with no known cause. It is the most common type of hypertension (high blood pressure).
(https://www.malacards.org/card/hypertension_essential)

* Hypotonia is related to hypotonia-speech impairment-severe cognitive delay syndrome and hypotonia, infantile, with psychomotor retardation. An important gene associated with Hypotonia is NALCN (Sodium Leak Channel, Non-Selective), and among its related pathways/superpathways are Post-translational modification- synthesis of GPI-anchored proteins and Glycosylphosphatidylinositol (GPI)-anchor biosynthesis. The drugs Naproxen and Quinine have been mentioned in the context of this disorder. Affiliated tissues include brain, spinal cord and skeletal muscle. Hypotonia is a medical term used to describe decreased muscle tone. Normally, even when relaxed, muscles have a very small amount of contraction that gives them a springy feel and provides some

resistance to passive movement. It is not the same as muscle weakness, although the two conditions can co-exist.
(https://www.malacards.org/card/hypotonia)

* Hypotrichosis is related to hypotrichosis 6 and hypotrichosis 7. An important gene associated with Hypotrichosis is MUHH2 (Hypotrichosis, Hereditary, Marie Unna Type, 2), and among its related pathways/superpathways are Developmental Biology and Keratinization. The drugs Minoxidil and Clobetasol have been mentioned in the context of this disorder. Affiliated tissues include skin, brain and testes, and related phenotype is integument. A hair disease that is characterized by sparse hair on the scalp resulting from abnormal hair follicle development and has_material_basis in mutations in proteins involved in hair growth, division or proliferation of cells within hair follicles.
(https://www.malacards.org/card/hypotrichosis)

* Lentigines, also known as lentigo, is related to noonan syndrome with multiple lentigines and melanocytic nevus syndrome, congenital. An important gene associated with Lentigines is PTPN11 (Protein Tyrosine Phosphatase, Non-Receptor Type 11), and among its related pathways/superpathways are Sertoli-Sertoli Cell Junction Dynamics and Common Cytokine Receptor Gamma-Chain Family Signaling Pathways. The drugs Aminolevulinic acid and Imiquimod have been mentioned in the context of this disorder. Affiliated tissues include skin, pancreas and lymph node, and related phenotypes are nystagmus and abnormality of the skin. A small pigmented spot on the skin with a clearly defined edge, surrounded by normal-appearing skin.
(https://www.malacards.org/card/lentigines)

* Motor Neuron Disease, also known as motor neuron diseases, is related to progressive muscular atrophy and frontotemporal dementia and/or amyotrophic lateral sclerosis 1, and has symptoms including ataxia, muscular fasciculation and hemiplegia. An important gene associated with Motor Neuron Disease is TARDBP (TAR DNA Binding Protein), and among its related pathways/superpathways are Neuroscience and Cytoskeleton remodeling Neurofilaments. The drugs Riluzole and Mexiletine have been mentioned in the context of this disorder. Affiliated tissues include Neural Tube and Neural Tube, and related phenotypes are behavior/neurological and cellular. A group of progressive neurological disorders that destroy cells that control essential muscle activity such as speaking, walking, breathing, and swallowing.
(https://www.malacards.org/card/motor_neuron_disease)

* Myocardial Infarction, also known as heart attack, is related to coronary heart disease 1 and atherosclerosis susceptibility, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Myocardial Infarction is MIAT (Myocardial Infarction Associated Transcript), and among its related pathways/superpathways are Photodynamic therapy-induced NFE2L2 (NRF2) survival signaling and Transcriptional activation by NRF2. The drugs Etanercept and Abciximab have been mentioned in the context of this disorder. Affiliated tissues include Bone and Limb, and related phenotypes are cardiovascular system and homeostasis/metabolism. A heart attack occurs when blood flow decreases or stops to a part of the heart, causing

damage to the heart muscle.
(https://www.malacards.org/card/myocardial_infarction)

* Myopathy, also known as muscular diseases, is related to myopathy, congenital and centronuclear myopathy, and has symptoms including back pain, leg cramps and muscle cramp. An important gene associated with Myopathy is RYR1 (Ryanodine Receptor 1), and among its related pathways/superpathways are Integrin Pathway and Cardiac conduction. The drugs Lidocaine and Hyaluronic acid have been mentioned in the context of this disorder. Affiliated tissues include skeletal muscle, testes and bone, and related phenotypes are behavior/neurological and growth/size/body region. A muscular disease in which the muscle fibers do not function resulting in muscular weakness.
(https://www.malacards.org/card/myopathy)

* Oral Candidiasis, also known as thrush, is related to candidiasis and severe combined immunodeficiency, and has symptoms including oral manifestations An important gene associated with Oral Candidiasis is DEFB4A (Defensin Beta 4A), and among its related pathways/superpathways are Innate Immune System and Defensins. The drugs Fluticasone and Fluconazole have been mentioned in the context of this disorder. Affiliated tissues include tongue, skin and kidney. A candidiasis that involves fungal infection of the mucous membrane of the mouth by Candida species, which is characterized by thick white or cream-colored deposits on inflamed mucosal membranes.
(https://www.malacards.org/card/oral_candidiasis)

* Peripheral Artery Disease, also known as peripheral arterial diseases, is related to critical limb ischemia and peripheral vascular disease, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Peripheral Artery Disease is CDKN2B-AS1, and among its related pathways/superpathways are Innate Immune System and Blood-Brain Barrier and Immune Cell Transmigration: VCAM-1/CD106 Signaling Pathways. The drugs Aspirin and Clopidogrel have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and bone, and related phenotypes are Decreased free cholesterol and cardiovascular system. A narrowing of the arteries other than those that supply the heart or the brain.
(https://www.malacards.org/card/peripheral_artery_disease)

* Peripheral Nervous System Disease, also known as peripheral neuropathy, is related to motor peripheral neuropathy and sensory peripheral neuropathy, and has symptoms including back pain, headache and neuralgia. An important gene associated with Peripheral Nervous System Disease is IARS2 (Isoleucyl-TRNA Synthetase 2, Mitochondrial), and among its related pathways/superpathways are Neuroscience and Guidance Cues and Growth Cone Motility. The drugs Naproxen and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, lung and brain, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A nervous system disease that affects the peripheral nervous system.

(https://www.malacards.org/card/peripheral_nervous_system_disease)

* Pollen Allergy, also known as hay fever, is related to esophagitis, eosinophilic, 1 and rhinitis, and has symptoms including coughing, snoring and tinnitus. An important gene associated with Pollen Allergy is CD164 (CD164 Molecule), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Cetirizine and Histamine have been mentioned in the context of this disorder. Affiliated tissues include eye, skin and testes, and related phenotypes are hematopoietic system and immune system. A respiratory allergy triggered by pollen.
(https://www.malacards.org/card/pollen_allergy)

* Post-Traumatic Stress Disorder, also known as stress disorders, post-traumatic, is related to traumatic brain injury and brain injury, and has symptoms including nervousness An important gene associated with Post-Traumatic Stress Disorder is LINC01090, and among its related pathways/superpathways are Circadian entrainment and Amphetamine addiction. The drugs Diazepam and Tramadol have been mentioned in the context of this disorder. Affiliated tissues include brain, heart and eye, and related phenotypes are homeostasis/metabolism and behavior/neurological. An anxiety disorder which results from a traumatic experience that results in psychological trauma.
(https://www.malacards.org/card/post_traumatic_stress_disorder)

* Prostatic Hyperplasia, Benign, also known as benign prostatic hyperplasia, is related to prostatic adenoma and prostatic hypertrophy, and has symptoms including prostatism An important gene associated with Prostatic Hyperplasia, Benign is KLK3 (Kallikrein Related Peptidase 3), and among its related pathways/superpathways are Endometrial cancer and Pathways in cancer. The drugs Bupivacaine and Doxazosin have been mentioned in the context of this disorder. Affiliated tissues include prostate, testes and kidney, and related phenotype is benign prostatic hyperplasia. Also called prostate enlargement, is a noncancerous increase in size of the prostate.
(https://www.malacards.org/card/prostatic_hyperplasia_benign)

* Psychosexual Disorder, also known as psychosexual disorders, is related to rumination disorder and functional gastric disease, and has symptoms including genital pain An important gene associated with Psychosexual Disorder is PDE5A (Phosphodiesterase 5A), and among its related pathways/superpathways are Calcium signaling pathway and Sudden Infant Death Syndrome (SIDS) Susceptibility Pathways. The drugs Apremilast and Analgesics have been mentioned in the context of this disorder. Affiliated tissues include spinal cord. A sexual problem that is psychological, rather than physiological in origin.
(https://www.malacards.org/card/psychosexual_disorder)

* Pulmonary Fibrosis, Idiopathic, also known as idiopathic pulmonary fibrosis, is related to acute interstitial pneumonia and idiopathic interstitial pneumonia, and has symptoms including dyspnea on exertion and dry cough. An important gene associated with Pulmonary Fibrosis, Idiopathic is SFTPA2 (Surfactant Protein A2), and among its related pathways/superpathways are Metabolism of proteins and Rheumatoid arthritis. The

drugs Esbriet and Ofev have been mentioned in the context of this disorder. Affiliated tissues include Placenta and Adipose, and related phenotypes are gastroesophageal reflux and pulmonary fibrosis. A condition in which tissues in the lungs become thick and stiff, or scarred, over time. The lungs then lose their ability to move oxygen to the brain and other parts of the body. Common symptoms include shortness of breath and a dry, hacking cough.
(https://www.malacards.org/card/pulmonary_fibrosis_idiopathic)

* Sleep Disorder, also known as non-organic sleep disorder, is related to advanced sleep phase syndrome and sleep apnea, and has symptoms including back pain, cachexia and cyanosis. An important gene associated with Sleep Disorder is HCRT (Hypocretin Neuropeptide Precursor), and among its related pathways/superpathways are Circadian rythm related genes and Circadian rhythm. The drugs Lansoprazole and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include heart, brain and testes, and related phenotypes are behavior/neurological and muscle. A sleep disorder, or somnipathy, is a medical disorder of the sleep patterns of a person or animal.
(https://www.malacards.org/card/sleep_disorder)

* Stroke, Ischemic, also known as cerebral infarction, is related to neonatal stroke and sneddon syndrome, and has symptoms including angina pectoris, back pain and chest pain. An important gene associated with Stroke, Ischemic is F2 (Coagulation Factor II, Thrombin), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Folate Metabolism. The drugs Angiotensin II and Valsartan have been mentioned in the context of this disorder. Affiliated tissues include Bone and Umbilical Cord, and related phenotypes are stroke and homeostasis/metabolism. A stroke is a medical emergency. Strokes happen when blood flow to your brain stops. Within minutes, brain cells begin to die. There are two kinds of stroke. The more common kind, called ischemic stroke, is caused by a blood clot that blocks or plugs a blood vessel in the brain. The other kind, called hemorrhagic stroke, is caused by a blood vessel that breaks and bleeds into the brain.
(https://www.malacards.org/card/stroke_ischemic)

* Tetanus, also known as lockjaw, is related to diphtheria and poliomyelitis, and has symptoms including fever and pruritus. An important gene associated with Tetanus is VAMP7 (Vesicle Associated Membrane Protein 7), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Iron and Natalizumab have been mentioned in the context of this disorder. Affiliated tissues include testes, t cells and brain, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A primary bacterial infectious disease that results in prolonged contraction of skeletal muscle fibers, has material basis in Clostridium tetani, which produces tetanospasmin, a neurotoxin, which is carried to the brain and spinal cord, where it binds irreversibly to receptors inhibiting neurotransmission. Damaged upper motor neurons cannot control reflex responses to afferent sensory stimuli.
(https://www.malacards.org/card/tetanus)

* Trigeminal Neuralgia, also known as tic douloureux, is related to burning mouth syndrome and postpartum depression, and has symptoms including back pain, facial pain and headache. An important gene associated with Trigeminal Neuralgia is SCN9A (Sodium Voltage-Gated Channel Alpha Subunit 9), and among its related pathways/superpathways are L1CAM interactions and Phase 0 - rapid depolarisation. The drugs Bupivacaine and Dexamethasone have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and skin, and related phenotypes are abnormality of the nervous system and trigeminal neuralgia. A chronic pain condition that causes extreme, sporadic, sudden burning or shock-like face pain.
(https://www.malacards.org/card/trigeminal_neuralgia)

1.3.2.10 RT-MB-35

https://archive.org/details/Resonant_Therapy-Molecular_Biology_35

Genetic Superpathways-Acoustic Neuroma; Genetic Superpathways-Acute Mountain Sickness; Genetic Superpathways-Arteries Anomalies Of; Genetic Superpathways-Autoimmune Disease Of Skin And Connective Tissue; Genetic Superpathways-Bronchitis; Genetic Superpathways-Chronic Inflammatory Demyelinating Polyradiculoneuropathy; Genetic Superpathways-Chronic Inflammatory Demyelinating Polyneuropathy; Genetic Superpathways-Chronic Tic Disorder; Genetic Superpathways-Demyelinating Polyneuropathy; Genetic Superpathways-Diarrhea; Genetic Superpathways-Empty Sella Syndrome; Genetic Superpathways-Hemarthrosis; Genetic Superpathways-Hypoglycemic Coma; Genetic Superpathways-Limb Girdle Muscular Dystrophy; Genetic Superpathways-Lipodermatosclerosis; Genetic Superpathways-Mast Cell Activation Syndrome; Genetic Superpathways-Metal Allergy; Genetic Superpathways-Methemoglobinemia; Genetic Superpathways-Neuromuscular Disease; Genetic Superpathways-Periostitis; Genetic Superpathways-Prostate Cancer; Genetic Superpathways-Radiculopathy; Genetic Superpathways-Retinal Degeneration; Genetic Superpathways-Retinal Detachment; Genetic Superpathways-Shoulder Impingement Syndrome; Genetic Superpathways-Spinal Stenosis; Genetic Superpathways-Spondylolisthesis; Genetic Superpathways-Spondylosis; Genetic Superpathways-Synovial Chondromatosis; Genetic Superpathways-Ulceratve Stomatitis

* Acoustic Neuroma, also known as vestibular schwannoma, is related to neuroma and facial paralysis, and has symptoms including back pain, coughing and headache. An important gene associated with Acoustic Neuroma is NF2 (Neurofibromin 2), and among its related pathways/superpathways are DNA Double-Strand Break Repair and Transcription-Coupled Nucleotide Excision Repair (TC-NER). The drugs Anti-Bacterial Agents and Anti-Infective Agents have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and bone, and related phenotypes are Synthetic

lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). A benign tumor that develops on the nerve that connects the ear to the brain.
(https://www.malacards.org/card/acoustic_neuroma)

* Acute Mountain Sickness, also known as high altitude pulmonary edema, is related to chronic mountain sickness and pulmonary edema, and has symptoms including apnea, cheyne-stokes respiration and coughing. An important gene associated with Acute Mountain Sickness is ACE (Angiotensin I Converting Enzyme), and among its related pathways/superpathways are Cellular Senescence (REACTOME) and Pathways in cancer. The drugs Acetazolamide and Ibuprofen have been mentioned in the context of this disorder. Affiliated tissues include lung, endothelial and heart, and related phenotypes are cardiovascular system and behavior/neurological. The negative health effect of high altitude, caused by rapid exposure to low amounts of oxygen at high elevation.
(https://www.malacards.org/card/acute_mountain_sickness)

* Arteries, Anomalies of, also known as artery disease, is related to peripheral artery disease and renal artery disease. An important gene associated with Arteries, Anomalies of is TRPV1 (Transient Receptor Potential Cation Channel Subfamily V Member 1), and among its related pathways/superpathways are Vesicle-mediated transport and Lipoprotein metabolism. The drugs Everolimus and Miconazole have been mentioned in the context of this disorder. Affiliated tissues include an artery, heart and endothelial, and related phenotypes are abnormality of the cardiovascular system and Decreased free cholesterol. A vascular disease that is located in an artery.
(https://www.malacards.org/card/arteries_anomalies_of)

* Autoimmune Disease of Skin and Connective Tissue is related to bullous skin disease and bullous pemphigoid. An important gene associated with Autoimmune Disease of Skin and Connective Tissue is COL17A1 (Collagen Type XVII Alpha 1 Chain), and among its related pathways/superpathways are Degradation of the extracellular matrix and Cell junction organization. Affiliated tissues include skin and t cells, and related phenotype is integument. A hypersensitivity reaction type II disease that is the abnormal functioning of the immune system that causes the immune system to produce antibodies or T cells against cells and/or tissues in the skin and connective tissue.
(https://www.malacards.org/card/autoimmune_disease_of_skin_and_connective_tissue)

* Bronchitis, also known as chronic bronchitis, is related to bronchial disease and sinusitis, and has symptoms including cough, shortness of breath and low fever. An important gene associated with Bronchitis is ELANE (Elastase, Neutrophil Expressed), and among its related pathways/superpathways are Innate Immune System and Allograft rejection. The drugs Augmentin and Avelox I.V. have been mentioned in the context of this disorder. Affiliated tissues include lung, testes and skin, and related phenotypes are hematopoietic system and immune system. A bronchial disease that is an inflammation of the bronchial tubes.
(https://www.malacards.org/card/bronchitis)

* Chronic Inflammatory Demyelinating Polyradiculoneuropathy, also known as polyradiculoneuropathy, chronic inflammatory demyelinating, is related to hereditary neuropathy with liability to pressure palsy and neuropathy, hereditary, with liability to pressure palsies. An important gene associated with Chronic Inflammatory Demyelinating Polyradiculoneuropathy is MPZ (Myelin Protein Zero), and among its related pathways/superpathways are TGF-Beta Pathway and Allograft rejection. The drugs Rho(D) Immune Globulin and gamma-Globulins have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, t cells and skin, and related phenotypes are cellular and homeostasis/metabolism. An autoimmune disorder, in which the myelin sheaths (the fatty covering on the fibers that insulate and protect the body's nerves) are attacked by the bodies immune system.
(
https://www.malacards.org/card/chronic_inflammatory_demyelinating_polyradiculoneuropathy)

* Chronic Inflammatory Demyelinating Polyneuropathy, also known as chronic inflammatory demyelinating polyradiculoneuropathy, is related to demyelinating polyneuropathy and chronic inflammatory demyelinating polyradiculoneuropathy. An important gene associated with Chronic Inflammatory Demyelinating Polyneuropathy is HP (Haptoglobin), and among its related pathways/superpathways are Cell adhesion molecules (CAMs) and L1CAM interactions. The drugs Antibodies and gamma-Globulins have been mentioned in the context of this disorder. Affiliated tissues include t cells, bone and skin, and related phenotypes are areflexia and unsteady gait. A neurological disorder that causes progressive weakness and impaired sensory function in the legs and arms.
(
https://www.malacards.org/card/chronic_inflammatory_demyelinating_polyneuropathy)

* Chronic Tic Disorder, also known as chronic motor or vocal tic disorder, is related to tic disorder and cytokine deficiency, and has symptoms including symptoms and recurrent muscle twitches (symptom). An important gene associated with Chronic Tic Disorder is DRD4 (Dopamine Receptor D4), and among its related pathways/superpathways are Regulation of IFNA signaling and Immune response Fc epsilon RI pathway. The drugs Aripiprazole and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, colon and b cells, and related phenotype is homeostasis/metabolism. A tic disorder that is characterized by single or multiple motor or phonic tics, but not both, which are present for more than a year.
(https://www.malacards.org/card/chronic_tic_disorder)

* Demyelinating Polyneuropathy, also known as peripheral demyelinating neuropathy, is related to chronic inflammatory demyelinating polyneuropathy and guillain-barre syndrome. An important gene associated with Demyelinating Polyneuropathy is PMP22 (Peripheral Myelin Protein 22), and among its related pathways/superpathways are Neuroscience and L1CAM interactions. The drugs Rho(D) Immune Globulin and gamma-Globulins have been mentioned in the context of this disorder. Affiliated tissues

include t cells, spinal cord and b cells, and related phenotypes are behavior/neurological and homeostasis/metabolism. A type of polyneuropathy in which almost solely the peripheral nerve myelin is affected.
(https://www.malacards.org/card/demyelinating_polyneuropathy)

* Diarrhea, also known as diarrhea of presumed infectious origin, is related to diarrhea 8, secretory sodium, congenital and inflammatory diarrhea. An important gene associated with Diarrhea is WNT2B (Wnt Family Member 2B), and among its related pathways/superpathways is Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers. The drugs Ceftriaxone and Carboprost Tromethamine have been mentioned in the context of this disorder. Affiliated tissues include lung, breast and colon, and related phenotypes are digestive/alimentary and homeostasis/metabolism. A gastrointestinal system disease described as the condition of having frequent loose or liquid bowel movements.
(https://www.malacards.org/card/diarrhea)

* Empty Sella Syndrome, also known as empty sella turcica, is related to diabetes insipidus and galactorrhea. An important gene associated with Empty Sella Syndrome is PRL (Prolactin), and among its related pathways/superpathways are TGF-Beta Pathway and Peptide ligand-binding receptors. The drugs Hormone Antagonists and Hormones have been mentioned in the context of this disorder. Affiliated tissues include pituitary, brain and testes, and related phenotypes are endocrine/exocrine gland and neoplasm. A condition that involves the sella turcica, a bony structure at the base of the brain that protects the pituitary gland.
(https://www.malacards.org/card/empty_sella_syndrome)

* Hemarthrosis, also known as hemarthrosis involving pelvic region and thigh, is related to afibrinogenemia, congenital and factor x deficiency, and has symptoms including arthralgia, hemoptysis and metatarsalgia. An important gene associated with Hemarthrosis is F8 (Coagulation Factor VIII), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Collagen chain trimerization. The drugs Bevacizumab and Hyaluronic acid have been mentioned in the context of this disorder. Affiliated tissues include bone, b cells and monocytes, and related phenotypes are cardiovascular system and homeostasis/metabolism. Hemarthrosis is a bleeding into joint spaces.
(https://www.malacards.org/card/hemarthrosis)

* Hypoglycemic Coma is related to hemangiopericytoma, malignant and acyl-coa dehydrogenase, medium-chain, deficiency of. An important gene associated with Hypoglycemic Coma is INS (Insulin), and among its related pathways/superpathways are TGF-Beta Pathway and PI3K-Akt signaling pathway. The drugs Etanercept and Everolimus have been mentioned in the context of this disorder. Affiliated tissues include brain, kidney and liver, and related phenotypes are muscle and reproductive system. A severe consequence of low blood sugar levels.
(https://www.malacards.org/card/hypoglycemic_coma)

* Limb-Girdle Muscular Dystrophy, also known as lgmd, is related to autosomal recessive limb-girdle muscular dystrophy type 2e and autosomal dominant limb-girdle muscular dystrophy type 1g. An important gene associated with Limb-Girdle Muscular Dystrophy is LMNA (Lamin A/C), and among its related pathways/superpathways are Other types of O-glycan biosynthesis and Mannose type O-glycan biosynthesis. The drugs Lisinopril and Coenzyme Q10 have been mentioned in the context of this disorder. Affiliated tissues include skeletal muscle, heart and testes, and related phenotypes are Decreased viability and Decreased viability. A group of disorders which affect the voluntary muscles around the hips and shoulders.
(https://www.malacards.org/card/limb_girdle_muscular_dystrophy)

* Lipodermatosclerosis, also known as hypodermitis sclerodermaformis, is related to varicose veins and chronic venous insufficiency. An important gene associated with Lipodermatosclerosis is SERPINB2 (Serpin Family B Member 2), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Regulation of lipid metabolism Insulin signaling-generic cascades. The drugs Warfarin and Rivaroxaban have been mentioned in the context of this disorder. Affiliated tissues include skin, t cells and liver, and related phenotypes are cardiovascular system and growth/size/body region. Lipodermatosclerosis refers to changes in the skin of the lower legs. It is a form of panniculitis (inflammation of the layer of fat under the skin). Signs and symptoms include pain, hardening of skin, change in skin color (redness), swelling, and a tapering of the legs above the ankles. The exact underlying cause is unknown; however, it appears to be associated with venous insufficiency and/or obesity.
(https://www.malacards.org/card/lipodermatosclerosis)

* Mast Cell Activation Syndrome, also known as mcas, is related to monoclonal mast cell activation syndrome and nguyen syndrome. An important gene associated with Mast Cell Activation Syndrome is CHIT1 (Chitinase 1). The drugs Protein Kinase Inhibitors and Imatinib Mesylate have been mentioned in the context of this disorder. Affiliated tissues include skin, brain and heart. An immunological condition in which mast cells mistakenly release too many chemical mediators, resulting in several chronic symptoms involving the skin, gastrointestinal tract, heart, respiratory, and neurologic systems.
(https://www.malacards.org/card/mast_cell_activation_syndrome)

* Metal Allergy is related to limbic encephalitis with lgi1 antibodies and focal epithelial hyperplasia. An important gene associated with Metal Allergy is HLA-DQB1 (Major Histocompatibility Complex, Class II, DQ Beta 1), and among its related pathways/superpathways are TCR Signaling (Qiagen) and Allograft rejection. The drugs Anti-Bacterial Agents and Antibiotics, Antitubercular have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and eye. A hypersensitivity reaction type I disease triggered by a metal.
(https://www.malacards.org/card/metal_allergy)

* Methemoglobinemia is related to hereditary methemoglobinemia and acquired methemoglobinemia, and has symptoms including cyanosis An important gene

associated with Methemoglobinemia is CYB5R3 (Cytochrome B5 Reductase 3), and among its related pathways/superpathways are Amino sugar and nucleotide sugar metabolism and Metabolism. The drugs Lidocaine and Propofol have been mentioned in the context of this disorder. Affiliated tissues include lung, heart and kidney. A condition caused by elevated levels of methemoglobin in the blood.
(https://www.malacards.org/card/methemoglobinemia)

* Neuromuscular Disease, also known as neuromuscular diseases, is related to central core disease of muscle and spinal muscular atrophy, type ii, and has symptoms including athetosis, back pain and headache. An important gene associated with Neuromuscular Disease is TRPV4 (Transient Receptor Potential Cation Channel Subfamily V Member 4), and among its related pathways/superpathways are Cardiac conduction and Agrin Interactions at Neuromuscular Junction. The drugs Zinc and Naproxen have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, testes and brain, and related phenotypes are behavior/neurological and homeostasis/metabolism. A neuropathy that affect the nerves that control the voluntary muscles.
(https://www.malacards.org/card/neuromuscular_disease)

* Periostitis is related to periodontal disease and rheumatoid arthritis. An important gene associated with Periostitis is IL1RN (Interleukin 1 Receptor Antagonist), and among its related pathways/superpathways are Cytokine Signaling in Immune system and Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers. Affiliated tissues include bone, lung and endothelial. A medical condition caused by inflammation of the periosteum, a layer of connective tissue that surrounds bone.
(https://www.malacards.org/card/periostitis)

* Prostate cancer: A malignancy originating in tissues of the prostate. Most prostate cancers are adenocarcinomas that develop in the acini of the prostatic ducts. Other rare histopathologic types of prostate cancer that occur in approximately 5% of patients include small cell carcinoma, mucinous carcinoma, prostatic ductal carcinoma, transitional cell carcinoma, squamous cell carcinoma, basal cell carcinoma, adenoid cystic carcinoma (basaloid), signet-ring cell carcinoma and neuroendocrine carcinoma. A male reproductive organ cancer that is located in the prostate.
(https://www.malacards.org/card/prostate_cancer)

* Radiculopathy, also known as nerve root disorder, is related to meningitis and lymphadenitis, and has symptoms including neuralgia An important gene associated with Radiculopathy is IL6 (Interleukin 6), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Dexamethasone and Acetaminophen have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and spinal cord, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). A disorder of spinal nerve roots.
(https://www.malacards.org/card/radiculopathy)

* Retinal Degeneration, also known as degeneration of retina, is related to peripheral retinal degeneration and enhanced s-cone syndrome. An important gene associated with Retinal Degeneration is RPE65 (RPE65, Retinoid Isomerohydrolase), and among its related pathways/superpathways are Metabolism of fat-soluble vitamins and Visual Cycle in Retinal Rods. The drugs Lidocaine and Dorzolamide have been mentioned in the context of this disorder. Affiliated tissues include eye, retina and endothelial, and related phenotypes are nervous system and pigmentation. A retinal disease that is characterized by deterioration of the retina caused by the progressive and eventual death of the cells of the retina.
(https://www.malacards.org/card/retinal_degeneration)

* Retinal Detachment is related to persistent hyperplastic primary vitreous, autosomal recessive and persistent hyperplastic primary vitreous. An important gene associated with Retinal Detachment is RHO (Rhodopsin), and among its related pathways/superpathways are ERK Signaling and PI3K-Akt signaling pathway. The drugs Lidocaine and Ketorolac have been mentioned in the context of this disorder. Affiliated tissues include eye, retina and brain, and related phenotypes are retinal detachment and cardiovascular system. A disorder of the eye in which the retina separates from the layer underneath.
(https://www.malacards.org/card/retinal_detachment)

* Shoulder Impingement Syndrome, also known as impingement syndrome of shoulder region, is related to hemophilic arthropathy and pseudopapilledema, and has symptoms including arthralgia and metatarsalgia. An important gene associated with Shoulder Impingement Syndrome is SKIL (SKI Like Proto-Oncogene), and among its related pathways/superpathways are PI3K-Akt signaling pathway and Pathways in cancer. The drugs Lidocaine and Triamcinolone have been mentioned in the context of this disorder. Affiliated tissues include testes, spinal cord and bone, and related phenotypes are Decreased viability and Decreased viability. A syndrome which occurs when the tendons of the rotator cuff muscles become irritated and inflamed as they pass through the subacromial space, the passage beneath the acromion. This can result in pain, weakness and loss of movement at the shoulder.
(https://www.malacards.org/card/shoulder_impingement_syndrome)

* Spinal Stenosis, also known as spinal stenosis of lumbar region, is related to back pain and spondylolisthesis, and has symptoms including neck pain, torticollis and back pain. An important gene associated with Spinal Stenosis is CALCA (Calcitonin Related Polypeptide Alpha), and among its related pathways/superpathways are ERK Signaling and Integrin Pathway. The drugs Betamethasone and Dexamethasone have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, bone and spinal cord, and related phenotypes are Increased gamma-H2AX phosphorylation and hearing/vestibular/ear. A bone deterioration disease that has material basis in bony spurs, disc degeneration, or thickened ligaments which results in narrowing located in spinal cord.
(https://www.malacards.org/card/spinal_stenosis)

* Spondylolisthesis is related to spondylolysis and spinal stenosis, and has symptoms including back pain An important gene associated with Spondylolisthesis is BMP7 (Bone Morphogenetic Protein 7), and among its related pathways/superpathways are GPCR Pathway and p70S6K Signaling. The drugs Menthol and Ketamine have been mentioned in the context of this disorder. Affiliated tissues include set of vertebrae, bone and bone marrow, and related phenotypes are spondylolysis and spondylolisthesis at l5-s1. A bone structure disease that has material basis in displacement located in set of vertebrae.
(https://www.malacards.org/card/spondylolisthesis)

* Spondylosis, also known as spondylogenic compression of thoracic spinal cord, is related to head injury and osteoporosis. An important gene associated with Spondylosis is HTRA1 (HtrA Serine Peptidase 1), and among its related pathways/superpathways are Parathyroid hormone synthesis, secretion and action and Development_Hedgehog and PTH signaling pathways in bone and cartilage development. The drugs Dexamethasone and Pregabalin have been mentioned in the context of this disorder. Affiliated tissues include vertebral column, spinal cord and bone, and related phenotypes are growth/size/body region and cardiovascular system. A bone structure disease that involves degeneration between vertebra located in vertebral column.
(https://www.malacards.org/card/spondylosis)

* Synovial Chondromatosis, also known as synovial osteochondromatosis, is related to osteochondroma and osteoporosis, and has symptoms including arthralgia and metatarsalgia. An important gene associated with Synovial Chondromatosis is NOG (Noggin), and among its related pathways/superpathways are ERK Signaling and GPCR Pathway. Affiliated tissues include bone and endothelial, and related phenotypes are cellular and cardiovascular system. Synovial chondromatosis is a type of non-cancerous tumor that arises in the lining of a joint. The knee is most commonly affected, however it can affect any joint. The tumors begin as small nodules of cartilage.
(https://www.malacards.org/card/synovial_chondromatosis)

* Ulcerative Stomatitis, also known as minor oral aphthous ulceration, is related to nail disorder, nonsyndromic congenital, 1 and chronic interstitial cystitis, and has symptoms including halitosis and snoring. An important gene associated with Ulcerative Stomatitis is TP63 (Tumor Protein P63), and among its related pathways/superpathways are Direct p53 effectors and Activation of BH3-only proteins. The drugs Infliximab and Gastrointestinal Agents have been mentioned in the context of this disorder. Affiliated tissues include heart, liver and skin, and related phenotypes are homeostasis/metabolism and immune system. An infectious disease of the mouth characterized by swollen spongy gums, ulcers, and loose teeth.
(https://www.malacards.org/card/ulcerative_stomatitis)

1.3.2.11 RT-MB-36

https://archive.org/details/Resonant_Therapy-Molecular_Biology_36

Genetic Superpathways-Alcohol Dependence; Genetic Superpathways-Alcoholic Hepatitis; Genetic Superpathways-Alcoholic Liver Cirrhosis; Genetic Superpathways-Arthritis; Genetic Superpathways-Articulation Disorder; Genetic Superpathways-Buerger Disease; Genetic Superpathways-Commensal Bacteria Infectious Disease; Genetic Superpathways-Conjunctivochalasis; Genetic Superpathways-Degenerative Disc Disease; Genetic Superpathways-Dystonia; Genetic Superpathways-Fasciitis; Genetic Superpathways-Fatty Liver Disease; Genetic Superpathways-Fibrous Histiocytoma; Genetic Superpathways-Gait Apraxia; Genetic Superpathways-Ichthyosis Vulgaris; Genetic Superpathways-Intervertebral Disc Disease; Genetic Superpathways-Portal Hypertension; Genetic Superpathways-Portal Vein Thrombosis; Genetic Superpathways-Post-Thrombotic Syndrome; Genetic Superpathways-Primary Bacterial Infectious Disease; Genetic Superpathways-Pulmonary Embolism; Genetic Superpathways-Scapuloperoneal Myopathy; Genetic Superpathways-Telangiectasis; Genetic Superpathways-Thrombophlebitis; Genetic Superpathways-Thrombosis; Genetic Superpathways-Tooth Size; Genetic Superpathways-Varicose Veins; Genetic Superpathways-Viral Infectious Disease; Genetic Superpathways-Whiplash; Genetic Superpathways-Writing Disorder

* Alcohol Dependence, also known as aerodigestive tract cancer, squamous cell, alcohol-related, protection against, is related to alcohol abuse and psychotic disorder. An important gene associated with Alcohol Dependence is ADH1B (Alcohol Dehydrogenase 1B (Class I), Beta Polypeptide), and among its related pathways/superpathways are Alcoholism and Peptide ligand-binding receptors. The drugs Ethanol and Gabapentin have been mentioned in the context of this disorder. Affiliated tissues include brain, liver and testes, and related phenotypes are abnormality of the nervous system and alcoholism. A previous psychiatric diagnosis in which an individual is physically or psychologically dependent upon alcohol.
(https://www.malacards.org/card/alcohol_dependence)

* Alcoholic Hepatitis, also known as acute alcoholic liver disease, is related to hepatitis and hepatitis a. An important gene associated with Alcoholic Hepatitis is F2 (Coagulation Factor II, Thrombin), and among its related pathways/superpathways are TGF-Beta Pathway and Cytokine Signaling in Immune system. The drugs Ethanol and Metformin have been mentioned in the context of this disorder. Affiliated tissues include liver, brain and neutrophil, and related phenotypes are homeostasis/metabolism and liver/biliary system. Hepatitis (inflammation of the liver) due to excessive intake of alcohol. It is usually found in association with fatty liver, an early stage of alcoholic liver disease, and may contribute to the progression of fibrosis, leading to cirrhosis.
(https://www.malacards.org/card/alcoholic_hepatitis)

* Alcoholic Liver Cirrhosis, also known as portal cirrhosis, is related to antipyrine metabolism and peritonitis, and has symptoms including icterus An important gene

associated with Alcoholic Liver Cirrhosis is ADH1B (Alcohol Dehydrogenase 1B (Class I), Beta Polypeptide), and among its related pathways/superpathways are Metabolism and Cytochrome P450 - arranged by substrate type. The drugs Angiotensin II and Losartan have been mentioned in the context of this disorder. Affiliated tissues include Liver, liver and skin, and related phenotype is homeostasis/metabolism. A condition in which the liver does not function properly due to long-term damage. This damage is characterized by the replacement of normal liver tissue by scar tissue.
(https://www.malacards.org/card/alcoholic_liver_cirrhosis)

* Arthritis, also known as inflammatory joint disease, is related to juvenile rheumatoid arthritis and rheumatoid arthritis, systemic juvenile, and has symptoms including arthralgia, back pain and metatarsalgia. An important gene associated with Arthritis is TNF (Tumor Necrosis Factor), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Rayos and Methotrexate have been mentioned in the context of this disorder. Affiliated tissues include joint, skin over the joint and bone, and related phenotypes are Decreased Tat-dependent HIV-LTR-beta-galactosidase protein expression and homeostasis/metabolism. A bone inflammation disease that involves a response to irritation or injury, characterized by joint pain, swelling, stiffness located in joint and/or redness located in skin over the joint.
(https://www.malacards.org/card/arthritis)

* Articulation Disorder, also known as articulation disorders, is related to childhood apraxia of speech and stuttering. An important gene associated with Articulation Disorder is GNPTG (N-Acetylglucosamine-1-Phosphate Transferase Subunit Gamma), and among its related pathways/superpathways is Lysosome. Affiliated tissues include brain and tongue, and related phenotype is behavior/neurological. A speech disorder that involves mispronouncing speech sounds by omitting, distorting, substituting, or adding sounds which can make speech difficult to understand.
(https://www.malacards.org/card/articulation_disorder)

* Buerger Disease, also known as thromboangiitis obliterans, is related to peripheral vascular disease and arteries, anomalies of. An important gene associated with Buerger Disease is APOH (Apolipoprotein H), and among its related pathways/superpathways are Integrin Pathway and Response to elevated platelet cytosolic Ca2+. The drugs Citric Acid and Anesthetics have been mentioned in the context of this disorder. Affiliated tissues include Adipose and Adipose, and related phenotypes are hyperhidrosis and arthralgia. A recurring progressive inflammation and thrombosis (clotting) of small and medium arteries and veins of the hands and feet. It is strongly associated with use of tobacco products, primarily from smoking, but is also associated with smokeless tobacco.
(https://www.malacards.org/card/buerger_disease)

* Commensal Bacterial Infectious Disease is related to inclusion conjunctivitis and pertussis. An important gene associated with Commensal Bacterial Infectious Disease is DPT (Dermatopontin), and among its related pathways/superpathways are Allograft rejection and NF-KappaB Family Pathway. A bacterial infectious disease that results in

infection by bacteria which are part of the normal human flora when one or more of the defense mechanisms designed to restrict them from the usually sterile internal tissues are breached by accident, by intent (surgery), or by an underlying metabolic or an infectious disorder.
(https://www.malacards.org/card/commensal_bacterial_infectious_disease)

* Conjunctivochalasis is related to superior limbic keratoconjunctivitis and pulmonary emphysema. An important gene associated with Conjunctivochalasis is MMP3 (Matrix Metallopeptidase 3), and among its related pathways/superpathways are Innate Immune System and GPCR Pathway. The drugs Hyaluronic acid and Ephedrine have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and thyroid, and related phenotypes are hematopoietic system and homeostasis/metabolism. A common eye surface condition characterized by the presence of excess folds of the conjunctiva located between the globe of the eye and the eyelid margin. Symptoms range from dry eye, epiphora, and irritation, to localized pain, foreign body sensation, subconjunctival hemorrhage, and ulceration.
(https://www.malacards.org/card/conjunctivochalasis)

* Degenerative Disc Disease, also known as intervertebral disc degeneration, is related to intervertebral disc disease and spondylolisthesis, and has symptoms including sciatica An important gene associated with Degenerative Disc Disease is LINC01562, and among its related pathways/superpathways are Degradation of the extracellular matrix and ECM proteoglycans. The drugs Dopamine and Norepinephrine have been mentioned in the context of this disorder. Affiliated tissues include Cartilage and Cartilage, and related phenotype is limbs/digits/tail. A bone deterioration disease that has material basis in gradual dehydration and tears located in intervertebral disc.
(https://www.malacards.org/card/degenerative_disc_disease)

* Dystonia, also known as dystonic disease, is related to dystonia 3, torsion, x-linked and dystonia 12, and has symptoms including back pain, headache and muscle cramp. An important gene associated with Dystonia is TOR1A (Torsin Family 1 Member A), and among its related pathways/superpathways are Nicotine Pathway (Dopaminergic Neuron), Pharmacodynamics and Folate biosynthesis. The drugs Menthol and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, globus pallidus and cerebellum, and related phenotypes are behavior/neurological and muscle. Dystonia is a movement disorder that causes involuntary contractions of the muscles. These contractions result in twisting and repetitive movements. Sometimes they are painful. Dystonia can affect just one muscle, a group of muscles or all muscles. Symptoms can include tremors, voice problems or a dragging foot.
(https://www.malacards.org/card/dystonia)

* Fasciitis is related to ischemic fasciitis and pseudosarcomatous fibromatosis. An important gene associated with Fasciitis is USP6 (Ubiquitin Specific Peptidase 6), and among its related pathways/superpathways are ERK Signaling and Cytokine Signaling in Immune system. The drugs Lidocaine and Menthol have been mentioned in the

context of this disorder. Affiliated tissues include skin, breast and bone, and related phenotype is cardiovascular system. An inflammation of the fascia, which is the connective tissue surrounding muscles, blood vessels and nerves.
(https://www.malacards.org/card/fasciitis)

* Fatty Liver Disease, also known as fatty liver, is related to nonalcoholic steatohepatitis and hepatitis. An important gene associated with Fatty Liver Disease is MALAT1, and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Regulation of lipid metabolism by Peroxisome proliferator-activated receptor alpha (PPARalpha). The drugs Zinc and Pioglitazone have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and heart, and related phenotypes are homeostasis/metabolism and adipose tissue. Alcoholic fatty liver disease is the earliest stage of alcohol-related liver disease. The next stages are alcoholic hepatitis and cirrhosis. Fatty liver disease is a condition in which fat builds up in the liver.
(https://www.malacards.org/card/fatty_liver_disease)

* Fibrous Histiocytoma, also known as histiocytoma, benign fibrous, is related to myxofibrosarcoma and malignant fibroxanthoma. An important gene associated with Fibrous Histiocytoma is ATF1 (Activating Transcription Factor 1), and among its related pathways/superpathways are Transcriptional misregulation in cancer and Striated Muscle Contraction. The drugs Doxorubicin and Mechlorethamine have been mentioned in the context of this disorder. Affiliated tissues include bone, skin and lung. Benign fibrous histiocytomas, also called dermatofibromas, are benign skin growths. Hard solitary slow-growing papules (rounded bumps) that may appear in a variety of colours, usually brownish to tan; they are often elevated or pedunculated.
(https://www.malacards.org/card/fibrous_histiocytoma)

* Gait Apraxia is related to dementia and alzheimer disease, and has symptoms including waddling gait, gait ataxia and gait dyspraxia. An important gene associated with Gait Apraxia is GRN (Granulin Precursor), and among its related pathways/superpathways are Neuroscience and A-beta Signaling Pathways. The drugs Vitamin D and Ergocalciferol have been mentioned in the context of this disorder. Affiliated tissues include brain and bone, and related phenotypes are nervous system and no phenotypic analysis. It is characterised by an inability to initiate the process of walking, despite the power and coordination of the legs being normal when tested in the seated or lying position. The gait is broad-based with short steps with a tendency to fall backwards.
(https://www.malacards.org/card/gait_apraxia)

* Ichthyosis Vulgaris, also known as ichthyosis simplex, is related to keratosis and lichen planus, and has symptoms including trichorrhexis invaginata An important gene associated with Ichthyosis Vulgaris is FLG (Filaggrin), and among its related pathways/superpathways are Developmental Biology and Keratinization. Affiliated tissues include skin and testes, and related phenotypes are eczematoid dermatitis and asthma. A skin disorder causing dry, scaly skin.

(https://www.malacards.org/card/ichthyosis_vulgaris)

* Intervertebral Disc Disease, also known as intervertebral disc degeneration, is related to degenerative disc disease and spondylosis, and has symptoms including sciatica An important gene associated with Intervertebral Disc Disease is COL9A3 (Collagen Type IX Alpha 3 Chain), and among its related pathways/superpathways are Collagen chain trimerization and Degradation of the extracellular matrix. The drugs Mepivacaine and Peripheral Nervous System Agents have been mentioned in the context of this disorder. Affiliated tissues include bone, spinal cord and bone marrow, and related phenotypes are cardiovascular system and integument. A common musculo-skeletal disorder caused by degeneration of intervertebral disks of the lumbar spine. It results in low-back pain and unilateral leg pain.
(https://www.malacards.org/card/intervertebral_disc_disease)

* Portal Hypertension, also known as hypertension, portal, is related to esophageal varix and congenital hepatic fibrosis, and has symptoms including signs and symptoms, digestive An important gene associated with Portal Hypertension is DGUOK (Deoxyguanosine Kinase), and among its related pathways/superpathways are Signaling by GPCR and PEDF Induced Signaling. The drugs Spironolactone and Simvastatin have been mentioned in the context of this disorder. Affiliated tissues include liver, spleen and endothelial, and related phenotypes are homeostasis/metabolism and growth/size/body region. Portal hypertensioni s abnormally high blood pressure in branches of the portal vein, the large vein that brings blood from the intestine to the liver. Portal hypertension itself does not cause symptoms, but complications from the condition can lead to an enlarged abdomen, abdominal discomfort, confusion, drowsiness and internal bleeding. Cirrhosis (a form of chronic liver failure) is the most common cause of portal hypertension.
(https://www.malacards.org/card/portal_hypertension)

* Portal Vein Thrombosis is related to liver cirrhosis and hypersplenism. An important gene associated with Portal Vein Thrombosis is F2 (Coagulation Factor II, Thrombin), and among its related pathways/superpathways are Collagen chain trimerization and Response to elevated platelet cytosolic Ca2+. The drugs Benzocaine and Nadroparin have been mentioned in the context of this disorder. Affiliated tissues include liver, spleen and pancreatic islet, and related phenotypes are homeostasis/metabolism and integument. A form of venous thrombosis affecting the hepatic portal vein, which can lead to portal hypertension and reduction in the blood supply to the liver.
(https://www.malacards.org/card/portal_vein_thrombosis)

* Post-Thrombotic Syndrome (update to RT-MB 26 item) , also known as postphlebitic syndrome, is related to chronic venous insufficiency and thrombosis. An important gene associated with Post-Thrombotic Syndrome is F5 (Coagulation Factor V), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Toll-like Receptor Signaling Pathway. The drugs Dalteparin and Enoxaparin have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and bone, and related phenotypes are cardiovascular system and hematopoietic system. A venous

insufficiency that is characterized by aching pain, heaviness, swelling, cramps, itching, or tingling in the affected limb and is a chronic complication of deep venous thrombosis.
(https://www.malacards.org/card/post_thrombotic_syndrome)

* Primary Bacterial Infectious Disease is related to trench fever and syphilis. An important gene associated with Primary Bacterial Infectious Disease is TLR9 (Toll Like Receptor 9), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. Related phenotypes are cellular and growth/size/body region. A bacterial infectious disease that results in infection by bacteria as a result of their presence or activity within the normal, healthy host, and their intrinsic virulence is, in part, a necessary consequence of their need to reproduce and spread.
(https://www.malacards.org/card/primary_bacterial_infectious_disease)

* Pulmonary Embolism, also known as pulmonary artery embolism, is related to chronic thromboembolic pulmonary hypertension and respiratory failure, and has symptoms including coughing, hemoptysis and snoring. An important gene associated with Pulmonary Embolism is PLAT (Plasminogen Activator, Tissue Type), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Collagen chain trimerization. The drugs Lidocaine and Clopidogrel have been mentioned in the context of this disorder. Affiliated tissues include lung, heart and brain, and related phenotypes are homeostasis/metabolism and cardiovascular system. An artery disease characterized by a blockage of the main artery of the lung or one of its branches by a substance that has travelled from elsewhere in the body, e.g. a blood clot.
(https://www.malacards.org/card/pulmonary_embolism)

* Scapuloperoneal Myopathy is related to scapuloperoneal myopathy, myh7-related and scapuloperoneal myopathy, x-linked dominant. An important gene associated with Scapuloperoneal Myopathy is FHL1 (Four And A Half LIM Domains 1), and among its related pathways/superpathways are Cardiac muscle contraction and Tight junction. Related phenotype is muscle. A muscular dystrophy which begins at the lower legs and affects the shoulder region earlier and more severely than distal arm.
(https://www.malacards.org/card/scapuloperoneal_myopathy)

* Telangiectasis, also known as telangiectasia, is related to pulmonary arteriovenous malformation and hereditary hemorrhagic telangiectasia. An important gene associated with Telangiectasis is ACVRL1 (Activin A Receptor Like Type 1), and among its related pathways/superpathways are ERK Signaling and PAK Pathway. The drugs Clonidine and Estradiol have been mentioned in the context of this disorder. Affiliated tissues include skin, eye and liver, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). Telangiectasias, also known as spider veins, are small dilated blood vessels near the surface of the skin or mucous membranes, measuring between 0.5 and 1 millimeter in diameter.
(https://www.malacards.org/card/telangiectasis)

* Thrombophlebitis, also known as phlebitis and thrombophlebitis of superficial vessels of lower extremities, is related to lemierre's syndrome and mesenteric vascular occlusion. An important gene associated with Thrombophlebitis is SERPINC1 (Serpin Family C Member 1), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Collagen chain trimerization. The drugs Dalteparin and Heparin have been mentioned in the context of this disorder. Affiliated tissues include lung, bone and heart, and related phenotypes are homeostasis/metabolism and mortality/aging. A phlebitis (inflammation of a vein) related to a thrombus (blood clot).
(https://www.malacards.org/card/thrombophlebitis)

* Thrombosis, also known as thrombosis of blood vessel, is related to lateral sinus thrombosis and sagittal sinus thrombosis. An important gene associated with Thrombosis is F2 (Coagulation Factor II, Thrombin), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Collagen chain trimerization. The drugs Dalteparin and Heparin have been mentioned in the context of this disorder. Affiliated tissues include liver, heart and testes, and related phenotypes are homeostasis/metabolism and cardiovascular system. A vascular disease caused by the formation of a blood clot inside a blood vessel, obstructing the flow of blood through the circulatory system.
(https://www.malacards.org/card/thrombosis)

* Tooth Size is related to cleft lip and cleft lip/palate. An important gene associated with Tooth Size is PAX9 (Paired Box 9), and among its related pathways/superpathways are Pathways in cancer and Mesodermal Commitment Pathway. The drugs Benzocaine and Metformin have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and kidney, and related phenotypes are abnormality of the dentition and Synthetic lethal with vaccinia virus (VACV) infection. There are dental growth-promoting factors on both the X and the Y chromosomes. ...the promoting effect of the Y chromosome on tooth growth seems more effective than that of the X chromosome. Short roots, irrespective of root resorption, have been documented as a 'familial trait'.
(https://www.malacards.org/card/tooth_size)

* Varicose Veins, also known as venous ectasia, is related to chronic venous insufficiency and budd-chiari syndrome, and has symptoms including angina pectoris, chest pain and edema. An important gene associated with Varicose Veins is F2 (Coagulation Factor II, Thrombin), and among its related pathways/superpathways are Integrin Pathway and Cytokine Signaling in Immune system. The drugs Propranolol and Carvedilol have been mentioned in the context of this disorder. Affiliated tissues include liver, skin and testes, and related phenotypes are varicose veins and Reduced mammosphere formation. A vein disease that is characterized by swollen, twisted veins visible just under the surface of the skin.
(https://www.malacards.org/card/varicose_veins)

* Viral Infectious Disease, also known as arbovirus infections, is related to chronic active epstein-barr virus infection and hepatitis c virus, and has symptoms including fever, pruritus and pathological conditions, signs and symptoms. An important gene

associated with Viral Infectious Disease is TLR9 (Toll Like Receptor 9), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Zinc and Maraviroc have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and t cells, and related phenotypes are cellular and hematopoietic system. A disease by infectious agent that results in infection, has material basis in Viruses.
(https://www.malacards.org/card/viral_infectious_disease)

* Whiplash is related to cervicitis and avoidant personality disorder. An important gene associated with Whiplash is CCL5 (C-C Motif Chemokine Ligand 5), and among its related pathways/superpathways are PEDF Induced Signaling and TGF-Beta Pathway. The drugs Central Nervous System Depressants and Anesthetics have been mentioned in the context of this disorder. Affiliated tissues include testes, eye and spinal cord. A soft tissue injury to the neck-is also called neck sprain or neck strain.
(https://www.malacards.org/card/whiplash)

* Writing Disorder is related to dysgraphia and agraphia, and has symptoms including aprosodia An important gene associated with Writing Disorder is DCDC2 (Doublecortin Domain Containing 2). The drugs Olive and Omega 3 Fatty Acid have been mentioned in the context of this disorder. Affiliated tissues include testes, and related phenotypes are behavior/neurological and cellular. A learning disability that involves impaired written language ability such as impairments in handwriting, spelling, organization of ideas, and composition.
(https://www.malacards.org/card/writing_disorder)

1.3.2.12 RT-MB-37

https://archive.org/details/Resonant_Therapy-Molecular_Biology_37

Genetic Superpathways-Alpha-1 Antitrypsin Deficiency; Genetic Superpathways-Amphetamine Abuse; Genetic Superpathways-Blepharitis; Genetic Superpathways-Chronic Follicular Conjunctivitis; Genetic Superpathways-Chronic Ulcer Of Skin; Genetic Superpathways-Chronic Venous Leg Ulcers; Genetic Superpathways-Conversion Disorder; Genetic Superpathways-Denture Stomatitis; Genetic Superpathways-Distichiasis; Genetic Superpathways-Epidermoid Cysts; Genetic Superpathways-Facial Paralysis; Genetic Superpathways-Hemosiderosis; Genetic Superpathways-Intermittent Explosive Disorder; Genetic Superpathways-Irritant Dermatitis; Genetic Superpathways-Learning Disability; Genetic Superpathways-Leukostasis; Genetic Superpathways-Macular Degeneration Age Related1; Genetic Superpathways-Macular Holes; Genetic Superpathways-Muscle Hypertrophy; Genetic Superpathways-Nail Disease; Genetic Superpathways-Neurogenic Arthropathy; Genetic Superpathways-Ocular Dominance; Genetic Superpathways-Paronychia; Genetic Superpathways-Parotitis; Genetic Superpathways-Pertussis; Genetic Superpathways-Photokeratitis; Genetic Superpathways-Pulmonary Disease Chronic Obstructive; Genetic Superpathways-Streptococcal Toxic Shock Syndrome; Genetic Superpathways-

Substance Abuse; Genetic Superpathways-Substance Dependence

* Alpha-1-Antitrypsin Deficiency, also known as alpha 1-antitrypsin deficiency, is related to liver disease and pulmonary emphysema, and has symptoms including hemoptysis, snoring and coughing. An important gene associated with Alpha-1-Antitrypsin Deficiency is SERPINA1 (Serpin Family A Member 1), and among its related pathways/superpathways are Complement and coagulation cascades and Lung fibrosis. The drugs Serine and HIV Protease Inhibitors have been mentioned in the context of this disorder. Affiliated tissues include Liver, liver and lung, and related phenotypes are hepatomegaly and emphysema. A genetic disorder that may result in lung disease or liver disease. Onset of lung problems is typically between 20 and 50 years old. This may result in shortness of breath, wheezing, or an increased risk of lung infections. Complications may include COPD, cirrhosis, neonatal jaundice, or panniculitis.
(https://en.wikipedia.org/wiki/Alpha_1-antitrypsin_deficiency)

* Amphetamine Abuse, also known as amphetamine-related disorders, is related to myocardial infarction and acute myocardial infarction. An important gene associated with Amphetamine Abuse is SLC6A3 (Solute Carrier Family 6 Member 3), and among its related pathways/superpathways are Circadian entrainment and Phospholipase D signaling pathway. The drugs Dopamine and Amphetamine have been mentioned in the context of this disorder. Affiliated tissues include brain and colon, and related phenotypes are behavior/neurological and cellular. A substance abuse that involves the recurring use of amphetamines despite negative consequences.
(https://www.malacards.org/card/amphetamine_abuse)

* Blepharitis is related to blepharoconjunctivitis and keratosis follicularis spinulosa decalvans, x-linked, and has symptoms including erythema of the eyelids An important gene associated with Blepharitis is MMP9 (Matrix Metallopeptidase 9), and among its related pathways/superpathways are Protein processing in endoplasmic reticulum and Microglia Activation During Neuroinflammation: Microglia Polarization. The drugs Acitretin and Hyaluronic acid have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and skin. An eyelid disease that is characterized by often chronic inflammation of the eyelid, generally the part where eyelashes grow.
(https://www.malacards.org/card/blepharitis)

* Chronic Follicular Conjunctivitis is related to chlamydia and conjunctivitis. An important gene associated with Chronic Follicular Conjunctivitis is IL1A (Interleukin 1 Alpha), and among its related pathways/superpathways are IL-1 Family Signaling Pathways and Necroptosis. Affiliated tissues include eye, lung and brain, and related phenotypes are Decreased Tat-dependent HIV-LTR-beta-galactosidase protein expression and neoplasm. A type of conjunctivitis characterized by pinkish round bodies in the retrotarsal fold.
(https://www.malacards.org/card/chronic_follicular_conjunctivitis)

* Chronic Ulcer of Skin, also known as chronic wounds, is related to decubitus ulcer and pyoderma gangrenosum. An important gene associated with Chronic Ulcer of Skin is FGF2 (Fibroblast Growth Factor 2), and among its related pathways/superpathways are Pathways in cancer and Degradation of the extracellular matrix. The drugs Coal tar and Alginic acid have been mentioned in the context of this disorder. Affiliated tissues include skin, bone and testes, and related phenotypes are homeostasis/metabolism and neoplasm. A sore on the skin or a mucous membrane, accompanied by the disintegration of tissue.
(https://www.malacards.org/card/chronic_ulcer_of_skin)

* Chronic Venous Leg Ulcers is related to chronic venous insufficiency and venous insufficiency. An important gene associated with Chronic Venous Leg Ulcers is TIMP1 (TIMP Metallopeptidase Inhibitor 1), and among its related pathways/superpathways are Apoptotic Pathways in Synovial Fibroblasts and ERK Signaling. The drugs Laxatives and Carboxymethylcellulose Sodium have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and bone, and related phenotypes are Reduced mammosphere formation and Decreased Salmonella-containing vacuole maturation. Wounds that are thought to occur due to improper functioning of venous valves, usually of the legs (hence leg ulcers). They are the major occurrence of chronic wounds, occurring in 70% to 90% of leg ulcer cases.
(https://www.malacards.org/card/chronic_venous_leg_ulcers)

* Conversion Disorder, also known as hysterical neurosis, conversion type, is related to frontonasal dysplasia 1 and psychogenic movement, and has symptoms including waxy flexibility An important gene associated with Conversion Disorder is COMT (Catechol-O-Methyltransferase), and among its related pathways/superpathways is Biogenic Amine Synthesis. The drugs Ranibizumab and Triamcinolone have been mentioned in the context of this disorder. Affiliated tissues include testes, brain and cortex, and related phenotypes are endocrine/exocrine gland and respiratory system. A somatoform disorder that involves numbness, blindness, paralysis or fits without a neurological cause.
(https://www.malacards.org/card/conversion_disorder)

* Denture Stomatitis, also known as stomatitis, denture, is related to stomatitis and diabetes mellitus. An important gene associated with Denture Stomatitis is CXCL8 (C-X-C Motif Chemokine Ligand 8), and among its related pathways/superpathways are IL-17 Family Signaling Pathways and Immune response IFN gamma signaling pathway. The drugs Nystatin and Miconazole have been mentioned in the context of this disorder. Affiliated tissues include colon, neutrophil and monocytes. A common condition where mild inflammation and redness of the oral mucous membrane occurs beneath a denture.
(https://www.malacards.org/card/denture_stomatitis)

* Distichiasis, also known as eyelashes, two rows of, is related to lymphedema-distichiasis syndrome and blepharocheilodontic syndrome 1. An important gene associated with Distichiasis is FOXC2 (Forkhead Box C2), and among its related

pathways/superpathways are Adherens junction and FGF signaling pathway. Affiliated tissues include eye and heart, and related phenotypes are distichiasis and digestive/alimentary. A distichia is an eyelash that arises from an abnormal spot on the eyelid.
(https://www.malacards.org/card/distichiasis)

* Epidermoid Cysts, also known as epidermoid cyst, is related to pilomatrixoma and basal cell carcinoma. An important gene associated with Epidermoid Cysts is KRT17 (Keratin 17), and among its related pathways/superpathways are Keratinization and Ca, cAMP and Lipid Signaling. The drugs Tranylcypromine and Thrombin have been mentioned in the context of this disorder. Affiliated tissues include spleen, testis and skin, and related phenotypes are abnormality of the skin and epidermoid cyst. An epidermoid cyst or epidermal inclusion cyst is a benign cyst usually found on the skin.
(https://www.malacards.org/card/epidermoid_cysts)

* Facial Paralysis, also known as facial palsy, is related to bell's palsy and camurati-engelmann disease, and has symptoms including seizures, muscle weakness and tremor. An important gene associated with Facial Paralysis is TUBB3 (Tubulin Beta 3 Class III), and among its related pathways/superpathways is N-cadherin signaling events. The drugs Prednisolone phosphate and Prednisolone have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and eye, and related phenotypes are cellular and nervous system. A common problem that involves the paralysis of any structures innervated by the facial nerve.
(https://www.malacards.org/card/facial_paralysis)

* Hemosiderosis, also known as haemosiderosis, is related to aceruloplasminemia and atransferrinemia. An important gene associated with Hemosiderosis is CP (Ceruloplasmin), and among its related pathways/superpathways are Transport of glucose and other sugars, bile salts and organic acids, metal ions and amine compounds and Insulin receptor recycling. The drugs Iron and Deferasirox have been mentioned in the context of this disorder. Affiliated tissues include liver, heart and bone, and related phenotypes are hematopoietic system and liver/biliary system. An iron metabolism disease that has material basis in an accumulation of hemosiderin, an iron-storage complex, resulting in iron overload.
(https://www.malacards.org/card/hemosiderosis)

* Intermittent Explosive Disorder, also known as explosive personality disorder, is related to personality disorder and disease of mental health. An important gene associated with Intermittent Explosive Disorder is SLC6A4 (Solute Carrier Family 6 Member 4), and among its related pathways/superpathways are Peptide ligand-binding receptors and G alpha (s) signalling events. The drugs Guanfacine and Naratriptan have been mentioned in the context of this disorder. Affiliated tissues include amygdala, brain and heart, and related phenotypes are homeostasis/metabolism and nervous system. An impulse control disorder that involves the episodic inability to control violent impulses with a disproportionate degree of aggressiveness.
(https://www.malacards.org/card/intermittent_explosive_disorder)

* Irritant Dermatitis, also known as dermatitis, irritant, is related to skin conditions and erysipelas. An important gene associated with Irritant Dermatitis is IL1A (Interleukin 1 Alpha), and among its related pathways/superpathways are Allograft rejection and Keratinization. The drugs Glycerol and Tacrolimus have been mentioned in the context of this disorder. Affiliated tissues include skin, lung and liver. A form of contact dermatitis that can be divided into forms caused by chemical irritants and those caused by physical irritants.
(https://www.malacards.org/card/irritant_dermatitis)

* Learning Disability, also known as learning disabilities, is related to speech and communication disorders and specific developmental disorder. An important gene associated with Learning Disability is FIBP (FGF1 Intracellular Binding Protein), and among its related pathways/superpathways is Neuroscience. The drugs Dopamine and Methylphenidate have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and heart, and related phenotypes are Decreased CDKN1A mRNA expression and Decreased CDKN1A mRNA expression. A specific developmental disorder that involves difficulty in scholastic skills such as reading, writing, spelling, reasoning, recalling and/or organizing information resulting from the brain's inability to receive and process information.
(https://www.malacards.org/card/learning_disability)

* Leukostasis is related to ischemia and granulocytopenia. An important gene associated with Leukostasis is ICAM1 (Intercellular Adhesion Molecule 1), and among its related pathways/superpathways are Human cytomegalovirus infection and fMLP Pathway. Affiliated tissues include myeloid, bone and endothelial, and related phenotypes are cardiovascular system and cellular. It is characterized by an extremely elevated blast cell count and symptoms of decreased tissue perfusion. Leukostasis is associated with people who suffer from bone and blood disorders and is very common among people suffering from acute myeloid leukemia or chronic myeloid leukemia. Leukostasis is a pathlogic diagnosis that inhibits efficient flow to the microvasculature of the body.
(https://www.malacards.org/card/leukostasis)

* Macular Degeneration, Age-Related, 1, also known as macular degeneration, is related to stargardt macular degeneration and central serous chorioretinopathy, and has symptoms including vision loss, tremor and angina pectoris. An important gene associated with Macular Degeneration, Age-Related, 1 is HMCN1 (Hemicentin 1), and among its related pathways/superpathways are Creation of C4 and C2 activators and Immune response Lectin induced complement pathway. Affiliated tissues include Eye and Eye, and related phenotypes are progressive visual loss and macular degeneration. A retinal degeneration characterized by gradual deterioration of light-sensing cells in the tissues at the back of the eye and has symptom vision loss.
(https://www.malacards.org/card/macular_degeneration_age_related_1)

* Macular Holes, also known as macular hole, is related to microvascular complications

of diabetes 5 and vitreous detachment. An important gene associated with Macular Holes is TGFB2 (Transforming Growth Factor Beta 2), and among its related pathways/superpathways are Human cytomegalovirus infection and Immune response IFN gamma signaling pathway. The drugs Ranibizumab and Verteporfin have been mentioned in the context of this disorder. Affiliated tissues include eye, retina and endothelial, and related phenotype is immune system. A macular hole is a small break in the macula, located in the center of the eye's light-sensitive tissue called the retina.
(https://www.malacards.org/card/macular_holes)

* Muscle Hypertrophy (update to RT-MB 27 item), also known as hypertrophy, is related to sleep apnea and aortic valve disease 2, and has symptoms including seizures, fever and dyspnea. An important gene associated with Muscle Hypertrophy is MSTN (Myostatin), and among its related pathways/superpathways are NFAT and Cardiac Hypertrophy and AMP-activated Protein Kinase (AMPK) Signaling. The drugs Acetylcholine and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include skeletal muscle, heart and smooth muscle, and related phenotypes are skeletal muscle hypertrophy and Decreased viability with paclitaxel. Muscle hypertrophy involves an increase in size of skeletal muscle through a growth in size of its component cells.
(https://www.malacards.org/card/muscle_hypertrophy)

* Nail Disease, also known as nail diseases, is related to paronychia and tooth agenesis, selective, 4, and has symptoms including pruritus, exanthema and clubbing of nail. An important gene associated with Nail Disease is FZD6 (Frizzled Class Receptor 6), and among its related pathways/superpathways are Akt Signaling and Cytokine Signaling in Immune system. The drugs Chlorhexidine and Phenol have been mentioned in the context of this disorder. Affiliated tissues include skin, lung and kidney, and related phenotypes are hematopoietic system and digestive/alimentary. A nail disease or onychosis is a disease or deformity of the nail.
(https://www.malacards.org/card/nail_disease)

* Neurogenic Arthropathy, also known as arthropathy associated with neurological disorder, is related to sensory peripheral neuropathy and neuropathy, hereditary sensory and autonomic, type v, and has symptoms including arthralgia and metatarsalgia. An important gene associated with Neurogenic Arthropathy is SPTLC1 (Serine Palmitoyltransferase Long Chain Base Subunit 1), and among its related pathways/superpathways are Apoptosis and survival Anti-apoptotic TNFs/NF-kB/Bcl-2 pathway and p75(NTR)-mediated signaling. The drugs Hyaluronic acid and Adjuvants, Immunologic have been mentioned in the context of this disorder. Affiliated tissues include bone and heart. A severe degenerative disease related to nerve lesions that develops when the sensory mechanisms of joints are impaired.
(https://www.malacards.org/card/neurogenic_arthropathy)

* Ocular Dominance is related to fetal alcohol spectrum disorder and depression. An important gene associated with Ocular Dominance is GRIN1 (Glutamate Ionotropic Receptor NMDA Type Subunit 1), and among its related pathways/superpathways are

PEDF Induced Signaling and CREB Pathway. The drugs Anesthetics and Phenylephrine have been mentioned in the context of this disorder. Affiliated tissues include cortex, eye and retina, and related phenotypes are Decreased caspase 3/7 activity and Reduced mammosphere formation. The tendency to prefer visual input from one eye to the other, somewhat analogous to the laterality of right- or left-handedness; however, the side of the dominant eye and the dominant hand do not always match.
(https://www.malacards.org/card/ocular_dominance)

* Paronychia, also known as paronychia inflammation, is related to aggressive digital papillary adenocarcinoma and adenocarcinoma. An important gene associated with Paronychia is EGFR (Epidermal Growth Factor Receptor), and among its related pathways/superpathways are ERK Signaling and HIV Life Cycle. The drugs Fluorouracil and Cetuximab have been mentioned in the context of this disorder. Affiliated tissues include skin, lung and colon, and related phenotypes are Decreased viability and Decreased viability. A nail disease that is an often-tender bacterial or fungal infection of the hand or foot where the nail and skin meet at the side or the base of a finger or toenail.
(https://www.malacards.org/card/paronychia)

* Parotitis is related to meningoencephalitis and appendicitis. An important gene associated with Parotitis is SPINK1 (Serine Peptidase Inhibitor, Kazal Type 1), and among its related pathways/superpathways are AGE/RAGE pathway and LPA receptor mediated events. The drugs Isoniazid and Pyrazinamide have been mentioned in the context of this disorder. Affiliated tissues include salivary gland, thyroid and brain, and related phenotypes are hematopoietic system and homeostasis/metabolism. The inflammation of one or both parotid glands, the major salivary glands located on either side of the face, in humans.
(https://www.malacards.org/card/parotitis)

* Pertussis, also known as whooping cough, is related to neutrophil migration and pneumonia, and has symptoms including fever, pruritus and snoring. An important gene associated with Pertussis is TLR4 (Toll Like Receptor 4), and among its related pathways/superpathways are Innate Immune System and Apoptotic Pathways in Synovial Fibroblasts. The drugs Montelukast and Edetic Acid have been mentioned in the context of this disorder. Affiliated tissues include testes, t cells and neutrophil, and related phenotypes are homeostasis/metabolism and hematopoietic system. Whooping cough is an infectious bacterial disease that causes uncontrollable coughing.
(https://www.malacards.org/card/pertussis)

* Photokeratitis is related to interdigitating dendritic cell sarcoma and diabetic foot ulcers. An important gene associated with Photokeratitis is TCF12 (Transcription Factor 12), and among its related pathways/superpathways are Innate Immune System and Nanog in Mammalian ESC Pluripotency. Affiliated tissues include eye, skin and brain, and related phenotypes are hematopoietic system and immune system. Photokeratitis or ultraviolet keratitis is a painful eye condition caused by exposure of insufficiently protected eyes to the ultraviolet (UV) rays from either natural (e.g. intense sunlight) or

artificial (e.g. the electric arc during welding).
(https://www.malacards.org/card/photokeratitis)

* Pulmonary Disease, Chronic Obstructive, also known as chronic obstructive pulmonary disease, is related to respiratory failure and alpha-1-antitrypsin deficiency, and has symptoms including tremor, fever and angina pectoris. An important gene associated with Pulmonary Disease, Chronic Obstructive is LINC00229 (Long Intergenic Non-Protein Coding RNA 229), and among its related pathways/superpathways are Matrix Metalloproteinases and Rheumatoid arthritis. The drugs Advair and Anoro Ellipta have been mentioned in the context of this disorder. Affiliated tissues include lung, testes and heart, and related phenotype is chronic obstructive pulmonary disease. A common, complex disorder defined by irreversible airflow obstruction due to chronic bronchitis, emphysema, and/or small airways disease.
(https://www.malacards.org/card/pulmonary_disease_chronic_obstructive)

* Streptococcal Toxic-Shock Syndrome, also known as streptococcal toxic shock syndrome, is related to fasciitis and peritonitis. An important gene associated with Streptococcal Toxic-Shock Syndrome is IL6 (Interleukin 6), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. Affiliated tissues include heart, eye and monocytes. Streptococcal toxic shock syndrome begins with flu-like symptoms (fever, chills, and muscle aches). Pain is common, usually in an extremity, sometimes in the abdomen or chest. The condition progresses to confusion and coma. Blood pressure drops, kidneys malfunction, and soft tissues may be infected.
(https://www.malacards.org/card/streptococcal_toxic_shock_syndrome)

* Substance Abuse, also known as substance-related disorders, is related to eating disorder and cocaine abuse, and has symptoms including symptoms An important gene associated with Substance Abuse is MIAT (Myocardial Infarction Associated Transcript), and among its related pathways/superpathways are Peptide ligand-binding receptors and Circadian entrainment. The drugs Amphetamine and Buprenorphine have been mentioned in the context of this disorder. Affiliated tissues include testes, brain and cortex, and related phenotypes are behavior/neurological and homeostasis/metabolism. A substance-related disorder that involves a maladaptive pattern of substance use leading to significant impairment in functioning.
(https://www.malacards.org/card/substance_abuse)

* Substance Dependence is related to drug dependence and depression. An important gene associated with Substance Dependence is OPRM1 (Opioid Receptor Mu 1), and among its related pathways/superpathways are Signaling by GPCR and Transmission across Chemical Synapses. The drugs Dopamine and Ethanol have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and cortex, and related phenotypes are Decreased viability and Decreased viability. A substance-related disorder that involves the continued use of alcohol or other drugs despite problems related to use of the substance.
(https://www.malacards.org/card/substance_dependence)

1.3.2.13 RT-MB-38

https://archive.org/details/Resonant_Therapy-Molecular_Biology_38

EGLEPG Peptide; Endogenous Amylin-Insulin Peptides; Genetic Superpathways-Acute Insulin Response; Genetic Superpathways-Aging1; Genetic Superpathways-Aging2; Genetic Superpathways-Background Diabetic Retinopathy; Genetic Superpathways-Buruli Ulcer; Genetic Superpathways-Cellulitis; Genetic Superpathways-Contact Dermatitis; Genetic Superpathways-Diabetes Mellitus; Genetic Superpathways-Diabetes Mellitus Ketosis Prone; Genetic Superpathways-Diabetes Mellitus Noninsulin Dependent; Genetic Superpathways-Diabetic Angiopathy; Genetic Superpathways-Diabetic Autonomic Neuropathy; Genetic Superpathways-Diabetic Cataract; Genetic Superpathways-Diabetic Encephalopathy; Genetic Superpathways-Diabetic Foot Ulcers; Genetic Superpathways-Diabetic Macular Edema; Genetic Superpathways-Diabetic Neuropathy; Genetic Superpathways-Diabetic Polyneuropathy; Genetic Superpathways-Hyperinsulinism; Genetic Superpathways-Intracranial Aneurysm; Genetic Superpathways-Limbal Stem Cell Deficiency; Genetic Superpathways-Microvascular Complications Of Diabetes1; Genetic Superpathways-Microvascular Complications Of Diabetes3; Genetic Superpathways-Microvascular Complications Of Diabetes5; Genetic Superpathways-Muscular Dystrophy; Genetic Superpathways-Necrotizing Fasciitis; Genetic Superpathways-Osteomyelitis; IDR-1018 Peptide

* EGLEPG peptide (EGLEPG) corresponds to a broadly bioactive xGxxPG consensus sequence first identified in elastin degradation products. Peptides matching this motif not only regulate MMP and TIMP expression in endothelial cells, dermal fibroblasts, and macrophages, but also stimulate migratory, proliferative, and morphogenic behaviors in these cells, as well as in keratinocytes. In vivo, xGxxPG peptides stimulate angiogenesis. This reports suggests multiple mechanisms through which xGxxPG-containing peptides may regulate tissue repair, including protease/inhibitor modulation and progenitor cell chemotaxis in a large animal model of diabetic wounds.

* Endogenous Amylin-Insulin peptides. Insulin is a peptide hormone produced by beta cells of the pancreatic islets. It regulates the metabolism of carbohydrates, fats and protein by promoting the absorption of carbohydrates, especially glucose from the blood into liver, fat and skeletal muscle cells. Amylin, is also a peptide hormone. It is cosecreted with insulin from the pancreatic Beta cells. Amylin plays a role in glycemic regulation by slowing gastric emptying and promoting satiety, thereby preventing spikes in blood glucose levels after meals. In those who have lost a significant number of Beta cells, such as people with type 1 diabetes and those with long-time type 2 diabetes, amylin production is also likewise reduced. People with type 1 and 2 diabetes will benefit listening to this recording during meals to help manage blood sugar levels after the meal itself.

* Acute Insulin Response, also known as air, is related to apnea, obstructive sleep and hyperinsulinism. An important gene associated with Acute Insulin Response is AIR (Acute Insulin Response (2)), and among its related pathways/superpathways are Aldosterone synthesis and secretion and Glucose / Energy Metabolism. The drugs Liraglutide and Zinc have been mentioned in the context of this disorder. Affiliated tissues include lung, testes and liver, and related phenotypes are Increased cell death in breast cancer cell lines (MCF10A, MDA-MB-435) and Reduced mammosphere formation. Impaired insulin secretion, in response to a glucose challenge.
(https://www.malacards.org/card/acute_insulin_response)

* Aging (update to RT-MB-33 items) is related to huntington disease and atypical werner syndrome. An important gene associated with Aging is BCYRN1 (Brain Cytoplasmic RNA 1), and among its related pathways/superpathways are Cellular Senescence (REACTOME) and Endometrial cancer. The drugs Acetylcholine and Metformin have been mentioned in the context of this disorder. Affiliated tissues include brain, skin and heart, and related phenotypes are Decreased viability and Decreased viability. Senescence or biological aging.
(https://www.malacards.org/card/aging)

* Background Diabetic Retinopathy, also known as non proliferative diabetic retinopathy, is related to microvascular complications of diabetes 1 and severe nonproliferative diabetic retinopathy. An important gene associated with Background Diabetic Retinopathy is TLR9 (Toll Like Receptor 9), and among its related pathways/superpathways are Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers and Malaria. The drugs Ranibizumab and Bevacizumab have been mentioned in the context of this disorder. Affiliated tissues include eye, endothelial and testes, and related phenotype is digestive/alimentary. A medical condition in which damage occurs to the retina due to diabetes mellitus.
(https://www.malacards.org/card/background_diabetic_retinopathy)

* Buruli Ulcer, also known as buruli ulcer, susceptibility to, is related to bacterial infectious disease and hemorrhagic fever, and has symptoms including nodule An important gene associated with Buruli Ulcer is SLC11A1 (Solute Carrier Family 11 Member 1), and among its related pathways/superpathways are Innate Immune System and Immune response NFAT in immune response. The drugs Rifampicin and Streptomycin have been mentioned in the context of this disorder. Affiliated tissues include skin, bone and t cells, and related phenotypes are digestive/alimentary and endocrine/exocrine gland. An infectious disease caused by Mycobacterium ulcerans.
(https://www.malacards.org/card/buruli_ulcer)

* Cellulitis is related to wells syndrome and scleritis, and has symptoms including fever, pruritus and exanthema. An important gene associated with Cellulitis is TNF (Tumor Necrosis Factor), and among its related pathways/superpathways are Innate Immune System and Developmental Biology. The drugs Lincomycin and Clindamycin have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and

breast, and related phenotypes are cellular and growth/size/body region. A bacterial infection involving the inner layers of the skin.
(https://www.malacards.org/card/cellulitis)

* Contact Dermatitis, also known as contact dermatitis/eczema, is related to palladium allergic contact dermatitis and nickel allergic contact dermatitis, and has symptoms including pruritus and exanthema. An important gene associated with Contact Dermatitis is FLG (Filaggrin), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Bacitracin and Bronopol have been mentioned in the context of this disorder. Affiliated tissues include testes, skin and t cells, and related phenotypes are hematopoietic system and cellular. A type of inflammation of the skin.
(https://www.malacards.org/card/contact_dermatitis)

* Diabetes Mellitus, also known as diabetes, is related to diabetes mellitus, permanent neonatal and diabetes mellitus, transient neonatal, 1, and has symptoms including tremor, angina pectoris and equilibration disorder. An important gene associated with Diabetes Mellitus is KCNJ11 (Potassium Voltage-Gated Channel Subfamily J Member 11), and among its related pathways/superpathways are MicroRNAs in cancer and Parkinsons Disease Pathway. The drugs Linagliptin and Metformin have been mentioned in the context of this disorder. Affiliated tissues include endothelial, heart and kidney. A group of metabolic disorders characterized by high blood sugar levels over a prolonged period.
(https://www.malacards.org/card/diabetes_mellitus)

* Diabetes mellitus, ketosis-prone: An atypical form of diabetes mellitus characterized by an acute initial presentation with severe hyperglycemia and ketosis, as seen in classic type 1 diabetes, but after initiation of insulin therapy, prolonged remission is often possible with cessation of insulin therapy and maintenance of appropriate metabolic control. Metabolic studies show a markedly blunted insulin secretory response to glucose, partially reversible with the improvement of blood glucose control. Variable levels of insulin resistance are observed, especially in obese patients. Pancreatic beta-cell autoimmunity is a rare finding. An intermediate form of diabetes that has some characteristics of type 1 and some of type 2 diabetes.
(https://www.malacards.org/card/diabetes_mellitus_ketosis_prone)

* Diabetes Mellitus, Noninsulin-Dependent, also known as type 2 diabetes mellitus, is related to maturity-onset diabetes of the young, type 1 and maturity-onset diabetes of the young, type 13, and has symptoms including tremor, angina pectoris and equilibration disorder. An important gene associated with Diabetes Mellitus, Noninsulin-Dependent is IRS1 (Insulin Receptor Substrate 1), and among its related pathways/superpathways are Cell cycle and p53 signaling pathway. The drugs Linagliptin and Metformin have been mentioned in the context of this disorder. Affiliated tissues include Pancreas and Adipose, and related phenotypes are type ii diabetes mellitus and insulin resistance. A diabetes mellitus that involves high blood glucose resulting from cells fail to use insulin properly.

(https://www.malacards.org/card/diabetes_mellitus_noninsulin_dependent)

* Diabetic Angiopathy, also known as diabetic angiopathies, is related to vasculitis and vascular disease. An important gene associated with Diabetic Angiopathy is IGFBP7 (Insulin Like Growth Factor Binding Protein 7), and among its related pathways/superpathways are Innate Immune System and Selenium Micronutrient Network. The drugs Saxagliptin and Bevacizumab have been mentioned in the context of this disorder. Affiliated tissues include bone, endothelial and heart, and related phenotypes are Increased cell death in breast cancer cell lines (MCF10A, MDA-MB-435) and cellular. A form of angiopathy -disease of the blood vessels- associated with diabetic complications.
(https://www.malacards.org/card/diabetic_angiopathy)

* Diabetic Autonomic Neuropathy, also known as diabetic neuropathies, is related to diabetic neuropathy and microvascular complications of diabetes 1, and has symptoms including sciatica and neuralgia. An important gene associated with Diabetic Autonomic Neuropathy is AKR1B1 (Aldo-Keto Reductase Family 1 Member B), and among its related pathways/superpathways are PI3K-Akt signaling pathway and p75(NTR)-mediated signaling. The drugs Quinapril and Donepezil have been mentioned in the context of this disorder. Affiliated tissues include heart, testes and bone, and related phenotype is vision/eye. A wide spectrum of manifestations affecting many different organ systems, including the cardiovascular, gastrointestinal, genitourinary, pupillary, sudomotor, and neuroendocrine systems.
(https://www.malacards.org/card/diabetic_autonomic_neuropathy)

* Diabetic Cataract, also known as cataract - diabetic, is related to microvascular complications of diabetes 5 and turner syndrome. An important gene associated with Diabetic Cataract is AKR1B1 (Aldo-Keto Reductase Family 1 Member B), and among its related pathways/superpathways is Celecoxib Pathway, Pharmacodynamics. The drugs Ketorolac and Ketorolac Tromethamine have been mentioned in the context of this disorder. Affiliated tissues include eye, heart and endothelial, and related phenotype is neoplasm. A sight-related complication of diabetes that can cause misting or blurring of vision.
(https://www.malacards.org/card/diabetic_cataract)

* Diabetic Encephalopathy is related to encephalopathy and pigmentation disease. An important gene associated with Diabetic Encephalopathy is CREB1 (CAMP Responsive Element Binding Protein 1), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Sterol Regulatory Element-Binding Proteins (SREBP) signalling. Affiliated tissues include brain, kidney and cortex, and related phenotypes are behavior/neurological and homeostasis/metabolism. A brain disease that is characterized by functional impairment of cognition, cerebral signal conduction, neurotransmission and synaptic plasticity, and underlying structural pathology associated with diabetes.
(https://www.malacards.org/card/diabetic_encephalopathy)

* Diabetic Foot Ulcers, also known as diabetic foot ulcer, is related to peripheral artery disease and arteries, anomalies of, and has symptoms including seizures, tremor and angina pectoris. An important gene associated with Diabetic Foot Ulcers is PDGFB (Platelet Derived Growth Factor Subunit B), and among its related pathways/superpathways are Akt Signaling and Cytokine Signaling in Immune system. The drugs Saxagliptin and Clindamycin have been mentioned in the context of this disorder. Affiliated tissues include Bone, skin and bone, and related phenotypes are renal/urinary system and respiratory system. A disturbance of the wound healing process.
(https://www.malacards.org/card/diabetic_foot_ulcers)

* Diabetic Macular Edema is related to macular retinal edema and retinal vein occlusion. An important gene associated with Diabetic Macular Edema is VEGFA (Vascular Endothelial Growth Factor A), and among its related pathways/superpathways are Innate Immune System and TGF-Beta Pathway. The drugs Ranibizumab and Bevacizumab have been mentioned in the context of this disorder. Affiliated tissues include eye, endothelial and retina, and related phenotypes are cardiovascular system and hematopoietic system. An accumulation of fluid in the macula—part of the retina that controls our most detailed vision abilities—due to leaking blood vessels. In order to develop DME, you must first have diabetic retinopathy.
(https://www.malacards.org/card/diabetic_macular_edema)

* Diabetic Neuropathy, also known as diabetic neuropathies, is related to microvascular complications of diabetes 1 and diabetic autonomic neuropathy, and has symptoms including sciatica and neuralgia. An important gene associated with Diabetic Neuropathy is ACE (Angiotensin I Converting Enzyme), and among its related pathways/superpathways are AGE-RAGE signaling pathway in diabetic complications and PEDF Induced Signaling. The drugs Pregabalin and Isosorbide Dinitrate have been mentioned in the context of this disorder. Affiliated tissues include testes, spinal cord and skin, and related phenotypes are behavior/neurological and growth/size/body region. Nerve damaging disorders associated with diabetes mellitus.
(https://www.malacards.org/card/diabetic_neuropathy)

* Diabetic Polyneuropathy, also known as diabetes mellitus with polyneuropathy, is related to diabetes mellitus and neuropathy. An important gene associated with Diabetic Polyneuropathy is AKR1B1 (Aldo-Keto Reductase Family 1 Member B), and among its related pathways/superpathways are Neural Stem Cell Differentiation Pathways and Lineage-specific Markers and Microglia Activation During Neuroinflammation: Steady-State Microglia. The drugs Pregabalin and Cilostazol have been mentioned in the context of this disorder. Affiliated tissues include spinal cord, testes and skin, and related phenotypes are cardiovascular system and behavior/neurological. A peripheral nerve dysfunction. There are three main alterations involved in the pathologic changes of DPN: inflammation, oxidative stress, and mitochondrial dysfunction.
(https://www.malacards.org/card/diabetic_polyneuropathy)

* Hyperinsulinism, also known as hyperinsulinemia, is related to hyperinsulinemic hypoglycemia, familial, 6 and alstrom syndrome. An important gene associated with Hyperinsulinism is HNF4A (Hepatocyte Nuclear Factor 4 Alpha), and among its related pathways/superpathways are Regulation of lipid metabolism Insulin signaling-generic cascades and Aldosterone synthesis and secretion. The drugs Somatostatin and Octreotide have been mentioned in the context of this disorder. Affiliated tissues include ovary, endothelial and liver, and related phenotypes are Reduced mammosphere formation and growth/size/body region. An above normal level of insulin in the blood of a person.
(https://www.malacards.org/card/hyperinsulinism)

* Intracranial Aneurysm, also known as brain aneurysm, is related to cerebral aneurysms and arteriovenous malformations of the brain, and has symptoms including seizures, tremor and angina pectoris. An important gene associated with Intracranial Aneurysm is CDKN2B-AS1 (CDKN2B Antisense RNA 1), and among its related pathways/superpathways are Integrin Pathway and Phospholipase-C Pathway. The drugs tannic acid and Sevoflurane have been mentioned in the context of this disorder. Affiliated tissues include brain, eye and testes, and related phenotypes are cardiovascular system and homeostasis/metabolism. An abnormal bulge or "ballooning" in the wall of an artery in the brain.
(https://www.malacards.org/card/intracranial_aneurysm)

* Limbal Stem Cell Deficiency is related to corneal disease and keratopathy. An important gene associated with Limbal Stem Cell Deficiency is KRT3 (Keratin 3), and among its related pathways/superpathways are Cytoskeletal Signaling and CLEC7A (Dectin-1) signaling. The drugs Ophthalmic Solutions and Pharmaceutical Solutions have been mentioned in the context of this disorder. Affiliated tissues include Eye, eye and bone, and related phenotypes are immune system and digestive/alimentary. LSCD is characterized by a loss or deficiency of stem cells which are vital for re-population of the corneal epithelium. Corneal transparency is essential for vision, and thus the outer protective stratified corneal epithelium is under constant, rapid renewal with vigorous repair mechanisms.
(https://www.malacards.org/card/limbal_stem_cell_deficiency)

* Microvascular Complications of Diabetes 1, also known as proliferative diabetic retinopathy, is related to background diabetic retinopathy and vitreoretinopathy, neovascular inflammatory, and has symptoms including sciatica and neuralgia. An important gene associated with Microvascular Complications of Diabetes 1 is VEGFA (Vascular Endothelial Growth Factor A), and among its related pathways/superpathways are TGF-Beta Pathway and Akt Signaling. Affiliated tissues include eye, endothelial and kidney, and related phenotypes are cardiovascular system and digestive/alimentary. Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus.
(https://www.malacards.org/card/microvascular_complications_of_diabetes_1)

* Microvascular Complications of Diabetes 3, also known as diabetic nephropathy, is

related to microvascular complications of diabetes 5 and hyperglycemia. An important gene associated with Microvascular Complications of Diabetes 3 is ACE (Angiotensin I Converting Enzyme), and among its related pathways/superpathways are AGE-RAGE signaling pathway in diabetic complications and Renin-angiotensin system. Affiliated tissues include Kidney, kidney and endothelial, and related phenotype is renal/urinary system. Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus.
(https://www.malacards.org/card/microvascular_complications_of_diabetes_3)

* Microvascular Complications of Diabetes 5, also known as diabetic retinopathy, is related to severe nonproliferative diabetic retinopathy and background diabetic retinopathy. An important gene associated with Microvascular Complications of Diabetes 5 is PON1 (Paraoxonase 1), and among its related pathways/superpathways are AGE-RAGE signaling pathway in diabetic complications and HIF-1 signaling pathway. Affiliated tissues include Eye and Eye, and related phenotypes are cardiovascular system and homeostasis/metabolism. Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus.
(https://www.malacards.org/card/microvascular_complications_of_diabetes_5)

* Muscular Dystrophy, also known as muscular dystrophies, is related to muscular dystrophy, becker type and muscular dystrophy-dystroglycanopathy , type a, 4, and has symptoms including myoclonus, back pain and torticollis. An important gene associated with Muscular Dystrophy is DMD (Dystrophin), and among its related pathways/superpathways are Allograft rejection and Dilated cardiomyopathy (DCM). The drugs Carvedilol and Ramipril have been mentioned in the context of this disorder. Affiliated tissues include skeletal muscle, heart and brain, and related phenotypes are Decreased viability and Decreased viability. A myopathy is characterized by progressive skeletal muscle weakness degeneration.
(https://www.malacards.org/card/muscular_dystrophy)

* Necrotizing Fasciitis, also known as fasciitis, necrotizing, is related to fasciitis and noma, and has symptoms including generalized muscle weakness and spasm. An important gene associated with Necrotizing Fasciitis is CD46 (CD46 Molecule), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Vancomycin and Tobramycin have been mentioned in the context of this disorder. Affiliated tissues include skin, breast and liver, and related phenotype is cardiovascular system. Commonly known as flesh-eating disease, is an infection that results in the death of parts of the body's soft tissue.
(https://www.malacards.org/card/necrotizing_fasciitis)

* Osteomyelitis is related to chronic recurrent multifocal osteomyelitis and mycobacterium fortuitum, and has symptoms including bone pain and pain in limb. An important gene associated with Osteomyelitis is IL1RN (Interleukin 1 Receptor Antagonist), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs leucovorin and Trimethoprim have been mentioned in the context of this disorder. Affiliated tissues include bone, testes

and bone marrow, and related phenotypes are homeostasis/metabolism and hematopoietic system. A bone inflammation disease that has material basis in infection located in bone or located in bone marrow.
(https://www.malacards.org/card/osteomyelitis)

* IDR-1018 is a small cationic synthetic peptide (VRLIVAVRIWRR-NH2) that has been developed based on bactenecin, a peptide antibiotic isolated from bovine neutrophil granules. This peptide has numerous biological activities that target both eukaryotic and bacterial cells. By targeting the eukaryotic host it acts as a modulator of the immune system, affecting macrophage polarization and reducing levels of lipopolysaccharide-induced cytokine production. By targeting both Gram-negative (e.g. Pseudomonas aeruginosa and Escherichia coli) and Gram-positive (e.g. Staphylococcus aureus) bacteria 1018 acts as a potent antibacterial: it kills bacteria, disperses biofilms and inhibits bacterial swarming. Potential practical applications of 1018 range from neuroprotection and wound healing to potentiation of antimalarial, antiviral and antibacterial compounds.

1.3.2.14 RT-MB-39

https://archive.org/details/Resonant_Therapy-Molecular_Biology_39

Genetic Superpathways-Adrenal Gland Disease; Genetic Superpathways-Amyloidosis; Genetic Superpathways-Asthenopia; Genetic Superpathways-Atrial Fibrillation; Genetic Superpathways-Carbohydrate Metabolic Disorder; Genetic Superpathways-Common Wart; Genetic Superpathways-Congestive Heart Failure; Genetic Superpathways-Diabetes Mellitus Insulin Dependent; Genetic Superpathways-Drug Dependence; Genetic Superpathways-Dumping Syndrome; Genetic Superpathways-Dysphagia; Genetic Superpathways-Endocrine Pancreas Disease; Genetic Superpathways-Endogenous Depression; Genetic Superpathways-Fibromyalgia; Genetic Superpathways-Folliculitis; Genetic Superpathways-Glucose Intolerance; Genetic Superpathways-Hyperinsulinemic Hypoglycemia; Genetic Superpathways-Hypoglycemia; Genetic Superpathways-Infertility; Genetic Superpathways-Inner Ear Disease; Genetic Superpathways-Insulinoma; Genetic Superpathways-Lipid Metabolism Disorder; Genetic Superpathways-Measles; Genetic Superpathways-Migraine With Aura; Genetic Superpathways-Migraine Without Aura;Genetic Superpathways-Nonalcoholic Steatohepatitis; Genetic Superpathways-Otosclerosis; Genetic Superpathways-Temporal Arteritis; Genetic Superpathways-Tympanic Membrane Disease; Genetic Superpathways-Tympanosclerosis

* Adrenal Gland Disease, also known as adrenal gland diseases, is related to adrenal insufficiency, congenital, with 46,xy sex reversal, partial or complete and corticosteroid-binding globulin deficiency. An important gene associated with Adrenal Gland Disease is POMC (Proopiomelanocortin), and among its related pathways/superpathways are Myometrial Relaxation and Contraction Pathways and Aldosterone synthesis and secretion. The drugs Hydrocortisone acetate and Hydrocortisone have been mentioned in the context of this disorder. Affiliated tissues include adrenal gland, testes and pituitary, and related phenotypes are Decreased shRNA abundance (Z-score < -2) and Decreased shRNA abundance (Z-score < -2). An endocrine system disease that is located in the adrenal gland.
(https://www.malacards.org/card/adrenal_gland_disease)

* Amyloidosis, also known as amyloid disease, is related to amyloidosis, hereditary, transthyretin-related and al amyloidosis. An important gene associated with Amyloidosis is TTR (Transthyretin), and among its related pathways/superpathways are Innate Immune System and Activated PKN1 stimulates transcription of AR (androgen receptor) regulated genes KLK2 and KLK3. The drugs Simvastatin and Pramlintide have been mentioned in the context of this disorder. Affiliated tissues include brain, heart and liver, and related phenotypes are facial palsy and corneal dystrophy. A group of diseases in which abnormal proteins, known as amyloid fibrils, build up in tissue.
(https://www.malacards.org/card/amyloidosis)

* Asthenopia, also known as accommodative strain, is related to suppression amblyopia and xerophthalmia, and has symptoms including eye manifestations and visual discomfort. An important gene associated with Asthenopia is NCBP1 (Nuclear Cap Binding Protein Subunit 1), and among its related pathways/superpathways is Neuroscience. The drugs Loteprednol and Methylprednisolone hemisuccinate have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and heart, and related phenotypes are behavior/neurological and nervous system. Eye strain, also known as asthenopia, is an eye condition that manifests through nonspecific symptoms such as fatigue, pain in or around the eyes, blurred vision, headache, and occasional double vision. Symptoms often occur after reading, computer work, or other close activities that involve tedious visual tasks.
(https://www.malacards.org/card/asthenopia)

* Atrial Fibrillation, also known as fibrillation, atrial, is related to familial atrial fibrillation and congestive heart failure, and has symptoms including angina pectoris, edema and chest pain. An important gene associated with Atrial Fibrillation is KCNQ1 (Potassium Voltage-Gated Channel Subfamily Q Member 1), and among its related pathways/superpathways are Vascular smooth muscle contraction and Adrenergic signaling in cardiomyocytes. The drugs Atorvastatin and Amiodarone have been mentioned in the context of this disorder. Affiliated tissues include heart, kidney and testes, and related phenotypes are no effect and cardiovascular system. A heart conduction disease that is characterized by uncoordinated electrical activity in the heart's upper chambers (the atria), which causes the heartbeat to become fast and

irregular and has symptoms palpitations, weakness, fatigue, lightheadedness, dizziness, confusion, shortness of breath and chest pain.
(https://www.malacards.org/card/atrial_fibrillation)

* Carbohydrate Metabolic Disorder, also known as carbohydrate metabolism, inborn errors, is related to galactosemia and glycogen storage disease v. An important gene associated with Carbohydrate Metabolic Disorder is INS (Insulin), and among its related pathways/superpathways are Metabolism and Glycosaminoglycan metabolism. The drugs Cyclophosphamide and Primaquine have been mentioned in the context of this disorder. Affiliated tissues include testes, kidney and bone, and related phenotypes are no effect and homeostasis/metabolism. An inherited metabolic disorder that affect the catabolism and anabolism of carbohydrates.
(https://www.malacards.org/card/carbohydrate_metabolic_disorder)

* Common Wart is related to measles and mycobacterium abscessus, and has symptoms including raised wart. An important gene associated with Common Wart is CLEC7A (C-Type Lectin Domain Containing 7A), and among its related pathways/superpathways are Innate Immune System and Activated TLR4 signalling. The drugs Miconazole and Salicylic acid have been mentioned in the context of this disorder. Affiliated tissues include skin, skin and kidney, and related phenotypes are hematopoietic system and immune system. A viral infectious disease that results in infection located in skin, has material basis in human papillomavirus (types 2 and 4). This infection has symptom raised wart with roughened surface, most common on hands, but can grow anywhere on the body.
(https://www.malacards.org/card/common_wart)

* Congestive Heart Failure, also known as heart failure, is related to pulmonary edema and orthostatic intolerance, and has symptoms including tremor, angina pectoris and edema. An important gene associated with Congestive Heart Failure is MIR21 (MicroRNA 21), and among its related pathways/superpathways are MicroRNAs in cancer and Dilated cardiomyopathy (DCM). The drugs Sodium Citrate and Furosemide have been mentioned in the context of this disorder. Affiliated tissues include Adipose and Lateral Plate Mesoderm, and related phenotype is muscle. A heart disease that is characterized by any structural or functional cardiac disorder that impairs the ability of the heart to fill with or pump a sufficient amount of blood throughout the body.
(https://www.malacards.org/card/congestive_heart_failure)

* Diabetes Mellitus, Insulin-Dependent, also known as type 1 diabetes mellitus, is related to diabetes mellitus, insulin-dependent, 23 and type 1 diabetes mellitus 2, and has symptoms including polydipsia and polyuria. An important gene associated with Diabetes Mellitus, Insulin-Dependent is HNF1A (HNF1 Homeobox A), and among its related pathways/superpathways are Type I diabetes mellitus and T cell receptor signaling pathway. The drugs Zinc and Saxagliptin have been mentioned in the context of this disorder. Affiliated tissues include Bone and Pancreas, and related phenotypes are diabetes mellitus and polydipsia. A diabetes mellitus that results from the body's failure to produce insulin and has material basis in autoimmune destruction of insulin-

producing beta cells of the pancreas.
(https://www.malacards.org/card/diabetes_mellitus_insulin_dependent)

* Drug Dependence is related to polysubstance abuse and hallucinogen dependence. An important gene associated with Drug Dependence is OPRM1 (Opioid Receptor Mu 1), and among its related pathways/superpathways are Signaling by GPCR and Peptide ligand-binding receptors. The drugs Buprenorphine and Naloxone have been mentioned in the context of this disorder. Affiliated tissues include brain, breast and myeloid, and related phenotypes are behavior/neurological and homeostasis/metabolism. A substance dependence that involves the continued use of drugs despite problems related to use of the substance.
(https://www.malacards.org/card/drug_dependence)

* Dumping Syndrome, also known as dumping, is related to hyperinsulinemic hypoglycemia and duodenal ulcer, and has symptoms including constipation, pain, postoperative and postoperative nausea and vomiting. An important gene associated with Dumping Syndrome is SST (Somatostatin), and among its related pathways/superpathways are Signaling by GPCR and Aldosterone synthesis and secretion. The drugs Somatostatin and lanreotide have been mentioned in the context of this disorder. Affiliated tissues include small intestine, testes and lung. Dumping syndrome occurs when food, especially sugar, moves too quickly from the stomach to the duodenum—the first part of the small intestine—in the upper gastrointestinal (GI) tract. This condition is also called rapid gastric emptying.
(https://www.malacards.org/card/dumping_syndrome)

* Dysphagia, also known as deglutition disorders, is related to leigh syndrome and muscular disease, and has symptoms including seizures, nausea and vomiting and constipation. An important gene associated with Dysphagia is ARID1B (AT-Rich Interaction Domain 1B). The drugs Methylene blue and Fluorouracil have been mentioned in the context of this disorder. Affiliated tissues include lung, testes and tongue, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). Dysphagia is difficulty in swallowing.
(https://www.malacards.org/card/dysphagia)

* Endocrine Pancreas Disease, also known as disorder of endocrine pancreas, is related to mixed cell adenoma and secondary adrenal insufficiency. An important gene associated with Endocrine Pancreas Disease is INS (Insulin), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Developmental Biology. The drugs Pancrelipase and Melatonin have been mentioned in the context of this disorder. Affiliated tissues include pancreas, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A glucose homeostasis disorder.
(https://www.malacards.org/card/endocrine_pancreas_disease)

* Endogenous Depression, also known as unipolar depression, is related to atypical

depressive disorder and postpartum depression, and has symptoms including depressed - symptom An important gene associated with Endogenous Depression is MAOA (Monoamine Oxidase A), and among its related pathways/superpathways are Signaling by GPCR and Peptide ligand-binding receptors. The drugs Citalopram and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and heart, and related phenotypes are behavior/neurological and homeostasis/metabolism. A mental depression that is characterized by a dysregulation of the endogenous opioid system and not of the monaminergic system.
(https://www.malacards.org/card/endogenous_depression)

* Fibromyalgia, also known as fibromyalgia-fibromyositis syndrome, is related to depression and sexual disorder, and has symptoms including muscle weakness, fatigue and myoclonus. An important gene associated with Fibromyalgia is GRIN2D (Glutamate Ionotropic Receptor NMDA Type Subunit 2D), and among its related pathways/superpathways are Peptide ligand-binding receptors and Circadian rythm related genes. The drugs Etoricoxib and Ethanol have been mentioned in the context of this disorder. Affiliated tissues include brain, skin and testes, and related phenotypes are behavior/neurological and endocrine/exocrine gland. A common condition characterized by long-lasting (chronic) pain affecting many areas of the body. The pain is associated with tenderness that occurs with touch or pressure on the muscles, joints, or skin. Some affected individuals also report numbness, tingling, or a burning sensation (paresthesia) in the arms and legs.
(https://www.malacards.org/card/fibromyalgia)

* Folliculitis is related to eosinophilic pustular folliculitis and dermatitis, and has symptoms including exanthema An important gene associated with Folliculitis is CCL11 (C-C Motif Chemokine Ligand 11), and among its related pathways/superpathways are Innate Immune System and TGF-Beta Pathway. The drugs Lidocaine and Ketoconazole have been mentioned in the context of this disorder. Affiliated tissues include skin, bone and neutrophil, and related phenotypes are digestive/alimentary and immune system. Folliculitis is the infection and inflammation of one or more hair follicles.
(https://www.malacards.org/card/folliculitis)

* Glucose Intolerance, also known as impaired glucose tolerance, is related to abdominal obesity-metabolic syndrome 1 and coronary heart disease 1. An important gene associated with Glucose Intolerance is MT-TL1 (Mitochondrially Encoded TRNA-Leu (UUA/G) 1), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Regulation of lipid metabolism Insulin signaling-generic cascades. The drugs Metformin and Saxagliptin have been mentioned in the context of this disorder. Affiliated tissues include ovary, testes and liver, and related phenotypes are adipose tissue and endocrine/exocrine gland. A group of metabolic conditions that result in higher than normal blood glucose levels.
(https://www.malacards.org/card/glucose_intolerance)

* Hyperinsulinemic Hypoglycemia, also known as islet cell hyperplasia, is related to

hyperinsulinemic hypoglycemia, familial, 3 and hyperinsulinemic hypoglycemia, familial, 7. An important gene associated with Hyperinsulinemic Hypoglycemia is KCNJ11 (Potassium Voltage-Gated Channel Subfamily J Member 11), and among its related pathways/superpathways are Aldosterone synthesis and secretion and MAPK signaling pathway. The drugs Somatostatin and Octreotide have been mentioned in the context of this disorder. Affiliated tissues include pancreas, pancreatic islet and brain, and related phenotypes are growth/size/body region and endocrine/exocrine gland. A carbohydrate metabolic disorder that involves low blood glucose resulting from an excess of insulin.
(https://www.malacards.org/card/hyperinsulinemic_hypoglycemia)

* Hypoglycemia, also known as hypoglycaemia, is related to hyperinsulinemic hypoglycemia, familial, 3 and hyperinsulinemic hypoglycemia, familial, 6, and has symptoms including sugar craving An important gene associated with Hypoglycemia is G6PC (Glucose-6-Phosphatase Catalytic Subunit), and among its related pathways/superpathways are Metabolism and Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins.. The drugs Pramlintide and Diazoxide have been mentioned in the context of this disorder. Affiliated tissues include pancreas, brain and testes, and related phenotypes are no effect and shRNA abundance <= 50%. Hypoglycemia, also known as low blood sugar, is when blood sugar decreases to below normal levels.
(https://www.malacards.org/card/hypoglycemia)

* Infertility is related to male infertility and catsper-related male infertility, and has symptoms including pelvic pain An important gene associated with Infertility is NPHP4 (Nephrocystin 4), and among its related pathways/superpathways are G alpha (s) signalling events and Fertilization. The drugs Sodium Citrate and Metformin have been mentioned in the context of this disorder. Affiliated tissues include ovary, testes and skin, and related phenotypes are cellular and endocrine/exocrine gland. Infertility means not being able to become pregnant after a year of trying.
(https://www.malacards.org/card/infertility)

* Inner Ear Disease, also known as labyrinthine dysfunction, is related to autoimmune inner ear disease and superior semicircular canal dehiscence, and has symptoms including vertigo and earache. An important gene associated with Inner Ear Disease is TNF (Tumor Necrosis Factor), and among its related pathways/superpathways are PI3K-Akt signaling pathway and Gap junction trafficking. The drugs Histamine and Dimenhydrinate have been mentioned in the context of this disorder. Affiliated tissues include testes, bone and brain, and related phenotypes are homeostasis/metabolism and hearing/vestibular/ear. A disease located in the inner ear.
(https://www.malacards.org/card/inner_ear_disease)

* Insulinoma, also known as islet cell adenoma, is related to insulinomatosis and diabetes mellitus and multiple endocrine neoplasia, type i. An important gene associated with Insulinoma is MEN1 (Menin 1), and among its related pathways/superpathways are Aldosterone synthesis and secretion and Glucose / Energy Metabolism. The drugs Pancrelipase and Sunitinib have been mentioned in the

context of this disorder. Affiliated tissues include Pancreas, pancreas and liver, and related phenotypes are hyperhidrosis and seizures. An insulinoma is a tumor of the pancreas that is derived from beta cells and secretes insulin.
(https://www.malacards.org/card/insulinoma)

* Lipid Metabolism Disorder, also known as dyslipidemia, is related to fatty liver disease, nonalcoholic 1 and abdominal obesity-metabolic syndrome 1. An important gene associated with Lipid Metabolism Disorder is FADS1 (Fatty Acid Desaturase 1), and among its related pathways/superpathways are Metabolism and Regulation of lipid metabolism by Peroxisome proliferator-activated receptor alpha (PPARalpha). The drugs Simvastatin and Atorvastatin have been mentioned in the context of this disorder. Affiliated tissues include heart, liver and endothelial, and related phenotypes are Decreased free cholesterol and Increased LDL uptake. An inherited metabolic disorder that involves the creation and degradation of lipids.
(https://www.malacards.org/card/lipid_metabolism_disorder)

* Measles, also known as rubeola, is related to rubella and mumps, and has symptoms including fever, conjunctivitis and cough. An important gene associated with Measles is CD46 (CD46 Molecule), and among its related pathways/superpathways are Innate Immune System and TGF-Beta Pathway. The drugs Sodium Citrate and Vitamin A have been mentioned in the context of this disorder. Affiliated tissues include brain, eye and testes, and related phenotypes are hematopoietic system and cellular. A highly contagious infectious disease caused by the measles virus.
(https://www.malacards.org/card/measles)

* Migraine with Aura, also known as migraine with typical aura, is related to familial hemiplegic migraine and headache, and has symptoms including headache An important gene associated with Migraine with Aura is FLNA (Filamin A), and among its related pathways/superpathways are cAMP signaling pathway and Calcium signaling pathway. The drugs Levomilnacipran and Norepinephrine have been mentioned in the context of this disorder. Affiliated tissues include brain, endothelial and cortex, and related phenotypes are Decreased shRNA abundance (Z-score < -2) and Decreased shRNA abundance (Z-score < -2). A migraine characterized by migraine headache which is preceded or accompanied by a transient focal neurological phenomenon.
(https://www.malacards.org/card/migraine_with_aura)

* Migraine Without Aura, also known as common migraine, is related to migraine with aura and migraine with or without aura 1. An important gene associated with Migraine Without Aura is MGR4 (Migraine, Susceptibility To, 4), and among its related pathways/superpathways are Circadian entrainment and Long-term potentiation. The drugs Norepinephrine and Levomilnacipran have been mentioned in the context of this disorder. Affiliated tissues include brain, pituitary and bone, and related phenotypes are behavior/neurological and integument. A migraine that is characterized by migraine headaches that are not accompanied by an aura.
(https://www.malacards.org/card/migraine_without_aura)

* Nonalcoholic Steatohepatitis, also known as non-alcoholic steatohepatitis, is related to nonalcoholic fatty liver disease and hepatitis. An important gene associated with Nonalcoholic Steatohepatitis is SQSTM1 (Sequestosome 1), and among its related pathways/superpathways are Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins. and Common Cytokine Receptor Gamma-Chain Family Signaling Pathways. The drugs Ezetimibe and Metformin have been mentioned in the context of this disorder. Affiliated tissues include liver, testes and kidney, and related phenotypes are behavior/neurological and homeostasis/metabolism. An excessive fat build-up in the liver due to causes other than alcohol use.
(https://www.malacards.org/card/nonalcoholic_steatohepatitis)

* Otosclerosis is related to bone fracture and ankylosis, and has symptoms including earache An important gene associated with Otosclerosis is OTSC5 (Otosclerosis 5), and among its related pathways/superpathways are Degradation of the extracellular matrix and Human Embryonic Stem Cell Pluripotency. The drugs Acetylcysteine and Antioxidants have been mentioned in the context of this disorder. Affiliated tissues include bone, testes and skin, and related phenotypes are cardiovascular system and craniofacial. An otitis interna characterized by an abnormal bone growth in the middle ear.
(https://www.malacards.org/card/otosclerosis)

* Temporal Arteritis, also known as polymyalgia rheumatica, is related to miliary tuberculosis and aortitis, and has symptoms including muscle weakness, angina pectoris and edema. An important gene associated with Temporal Arteritis is CRP (C-Reactive Protein), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Prednisone and Anti-Inflammatory Agents have been mentioned in the context of this disorder. Affiliated tissues include testes, tongue and skin, and related phenotypes are joint stiffness and fever. A disorder that causes inflammation of your arteries, usually in the scalp, neck, and arms. It narrows the arteries, which keeps blood from flowing well.
(https://www.malacards.org/card/temporal_arteritis)

* Tympanic Membrane Disease, also known as disorder of tympanic membrane, is related to myringitis bullosa hemorrhagica and tympanosclerosis, and has symptoms including tinnitus, earache and paracousis. An important gene associated with Tympanic Membrane Disease is BCAT2 (Branched Chain Amino Acid Transaminase 2), and among its related pathways/superpathways are PI3K-Akt signaling pathway and ECM-receptor interaction. Related phenotypes are mortality/aging and embryo. A disease located in the tympanic membrane.
(https://www.malacards.org/card/tympanic_membrane_disease)

* Tympanosclerosis is related to deafness, progressive, with stapes fixation and otitis media. An important gene associated with Tympanosclerosis is COL2A1 (Collagen Type II Alpha 1 Chain), and among its related pathways/superpathways are ERK Signaling and Integrin Pathway. Affiliated tissues include bone, and related phenotypes are

cardiovascular system and cellular. A condition caused by hyalinization and subsequent calcification of subepithelial connective tissue of TM and middle ear, sometimes resulting in a detrimental effect to hearing.
(https://www.malacards.org/card/tympanosclerosis)

1.3.2.15 RT-MB-40

https://archive.org/details/Resonant_Therapy-Molecular_Biology_40

Genetic Superpathways-Allergic Contact Dermatitis; Genetic Superpathways-Alopecia Areata; Genetic Superpathways-Angiolipoma; Genetic Superpathways-Appendicitis; Genetic Superpathways-Bacterial Infectious Disease; Genetic Superpathways-Carpal Tunnel Syndrome; Genetic Superpathways-Charcot Marie Tooth Disease; Genetic Superpathways-Conjunctivitis; Genetic Superpathways-Cutaneous T-Cell Lymphoma; Genetic Superpathways-Diffuse Cutaneous Systemic Sclerosis; Genetic Superpathways-Diffuse Scleroderma; Genetic Superpathways-Glucose Metabolism Disease; Genetic Superpathways-Henoch-Schoenlein Purpura; Genetic Superpathways-Hypertrophic Cardiomyopathy; Genetic Superpathways-Infiltrating Angiolipoma; Genetic Superpathways-Infiltrating Lipoma; Genetic Superpathways-Localized Scleroderma; Genetic Superpathways-Miliaria; Genetic Superpathways-Mitochondrial Disorders; Genetic Superpathways-Mycosis Fungoides; Genetic Superpathways-Oppositional Defiant Disorder; Genetic Superpathways-Paronychia; Genetic Superpathways-Peptic Ulcer Perforation; Genetic Superpathways-Peritonitis; Genetic Superpathways-Polysubstance Abuse; Genetic Superpathways-Primary Systemic Mycosis; Genetic Superpathways-Respiratory Allergy; Genetic Superpathways-Scorpion Envenomation; Genetic Superpathways-Systemic Scleroderma; Genetic Superpathways-T Cell Deficiency

* Allergic Contact Dermatitis, also known as dermatitis, allergic contact, is related to 1,4-phenylenediamine allergic contact dermatitis and nickel allergic contact dermatitis. An important gene associated with Allergic Contact Dermatitis is IL31 (Interleukin 31), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Parthenolide and Hydrocortisone acetate have been mentioned in the context of this disorder. Affiliated tissues include testes, skin and t cells, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). A contact dermititis that is an allergic skin reaction to foreign chemical or substances leading to red, itchy, weepy reaction where the skin has come into contact with a substance that the immune system recognizes as foreign.
(https://www.malacards.org/card/allergic_contact_dermatitis)

* Alopecia Areata, also known as alopecia circumscripta, is related to aplastic anemia and vitiligo-associated multiple autoimmune disease susceptibility 1, and has symptoms including pruritus and exanthema. An important gene associated with Alopecia Areata is

TRPS1 (Transcriptional Repressor GATA Binding 1), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Clobetasol and Acitretin have been mentioned in the context of this disorder. Affiliated tissues include lung, breast and t cells, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). An autoimmune disease in which the immune system mistakenly attacks the hair follicles.
(https://www.malacards.org/card/alopecia_areata)

* Angiolipoma is related to liposarcoma and neurilemmoma. An important gene associated with Angiolipoma is ACTC1 (Actin Alpha Cardiac Muscle 1), and among its related pathways/superpathways are Cardiac conduction and Interleukin-4 and 13 signaling. The drugs Sirolimus and Miconazole have been mentioned in the context of this disorder. Affiliated tissues include breast, colon and spinal cord, and related phenotype is Reduced mammosphere formation. A lipoma that is a painful subcutaneous nodule, having all other features of a typical lipoma.
(https://www.malacards.org/card/angiolipoma)

* Appendicitis, also known as acute appendicitis, is related to diverticulitis and endometriosis, and has symptoms including fever, vomiting and pain. An important gene associated with Appendicitis is CRP (C-Reactive Protein), and among its related pathways/superpathways are Innate Immune System and Cytokine Signaling in Immune system. The drugs Ertapenem and Dexmedetomidine have been mentioned in the context of this disorder. Affiliated tissues include appendix, colon and testes, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A gastrointestinal system infectious disease that involves inflammation and infection of the appendix caused by the blockage of the lumen with a small, hard piece of stool, a foreign body or worms.
(https://www.malacards.org/card/appendicitis)

* Bacterial Infectious Disease, also known as bacterial infections, is related to commensal bacterial infectious disease and primary bacterial infectious disease. An important gene associated with Bacterial Infectious Disease is TNF (Tumor Necrosis Factor), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Ertapenem and Meropenem have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and colon, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). A disease by infectious agent that results in infection, has material basis in Bacteria.
(https://www.malacards.org/card/bacterial_infectious_disease)

* Carpal Tunnel Syndrome, also known as carpal tunnel syndrome, familial, is related to peripheral nervous system disease and epicondylitis, and has symptoms including seizures, tremor and back pain. An important gene associated with Carpal Tunnel Syndrome is TTR (Transthyretin), and among its related pathways/superpathways are Cytokine Signaling in Immune system and Human cytomegalovirus infection. The drugs

Prednisolone phosphate and Lidocaine have been mentioned in the context of this disorder. Affiliated tissues include testes, bone and thyroid, and related phenotypes are peripheral neuropathy and constrictive median neuropathy. A disorder caused by disturbances in nerve function (neuropathy), leading to pain and numbness or tingling (paresthesia) primarily in the wrist and hand.
(https://www.malacards.org/card/carpal_tunnel_syndrome)

* Charcot-Marie-Tooth Disease, also known as hereditary motor and sensory neuropathy, is related to charcot-marie-tooth disease, demyelinating, type 1a and charcot-marie-tooth disease and deafness, and has symptoms including seizures, tremor and back pain. An important gene associated with Charcot-Marie-Tooth Disease is MPZ (Myelin Protein Zero), and among its related pathways/superpathways are Aminoacyl-tRNA biosynthesis and COPI-independent Golgi-to-ER retrograde traffic. The drugs Lidocaine and Prednisolone phosphate have been mentioned in the context of this disorder. Affiliated tissues include Peripheral Nervous System, brain and spinal cord, and related phenotypes are behavior/neurological and cardiovascular system. A neuromuscular disease that is characterized by a slowly progressive degeneration of the muscles of the foot, lower leg, hand and forearm.
(https://www.malacards.org/card/charcot_marie_tooth_disease)

* Conjunctivitis, also known as madras eye, is related to giant papillary conjunctivitis and papillary conjunctivitis, and has symptoms including bloodshot eye, conjunctival congestion and redness of eye. An important gene associated with Conjunctivitis is PLG (Plasminogen), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Oralair and Bepotastine have been mentioned in the context of this disorder. Affiliated tissues include eye, testes and skin, and related phenotypes are hematopoietic system and immune system. A conjunctival disease characterized by an inflammation of the conjunctiva, the outermost layer of the eye and the inner surface of the eyelids.
(https://www.malacards.org/card/conjunctivitis)

* Cutaneous T Cell Lymphoma, also known as cutaneous t-cell lymphoma, is related to sezary's disease and adult t-cell leukemia. An important gene associated with Cutaneous T Cell Lymphoma is CTAGE1 (Cutaneous T Cell Lymphoma-Associated Antigen 1), and among its related pathways/superpathways are PEDF Induced Signaling and Akt Signaling. The drugs Bexarotene and Methoxsalen have been mentioned in the context of this disorder. Affiliated tissues include t cells, skin and bone, and related phenotypes are hematopoietic system and immune system. A group of disorders characterized by an abnormal accumulation of cancerous T-cells (a type of white blood cells) in the skin resulting in an itchy, red rash that can thicken or form a tumor.
(https://www.malacards.org/card/cutaneous_t_cell_lymphoma)

* Diffuse Cutaneous Systemic Sclerosis, also known as progressive cutaneous systemic scleroderma, is related to limited scleroderma and systemic scleroderma. An important gene associated with Diffuse Cutaneous Systemic Sclerosis is IRF5 (Interferon

Regulatory Factor 5), and among its related pathways/superpathways are Innate Immune System and NF-kappaB Signaling. The drugs Acetylcysteine and Iloprost have been mentioned in the context of this disorder. Affiliated tissues include skin, lung and kidney, and related phenotypes are gastroesophageal reflux and dyspnea. A subtype of systemic scleroderma (systemic sclerosis) characterized by skin hardening (fibrosis) and problems in many organs of the body.
(https://www.malacards.org/card/diffuse_cutaneous_systemic_sclerosis)

* Diffuse Scleroderma, also known as systemic sclerosis, diffuse, is related to scleroderma, familial progressive and limited scleroderma, and has symptoms including pruritus, exanthema and hidebound skin. An important gene associated with Diffuse Scleroderma is TGFB1 (Transforming Growth Factor Beta 1), and among its related pathways/superpathways are Development Angiotensin activation of ERK and NF-kappaB Signaling. The drugs Bosentan and Sodium Citrate have been mentioned in the context of this disorder. Affiliated tissues include lung, skin and bone. A chronic autoimmune condition that is a subtype of systemic scleroderma where patients may have extensive skin fibrosis on the arms, legs, and trunk and a high risk of developing internal organ damage.
(https://www.malacards.org/card/diffuse_scleroderma)

* Glucose Metabolism Disease (update), also known as glucose metabolism disorders, is related to diabetes mellitus and uremia. An important gene associated with Glucose Metabolism Disease is PINK1-AS (PINK1 Antisense RNA), and among its related pathways/superpathways are Metabolism of proteins and Aldosterone synthesis and secretion. The drugs Zinc and Pramlintide have been mentioned in the context of this disorder. Affiliated tissues include heart, endothelial and kidney, and related phenotypes are homeostasis/metabolism and growth/size/body region. Pathological conditions in which the blood glucose cannot be maintained within the normal range, such as in Hypoglycemia and Hyperglycemia.
(https://www.malacards.org/card/glucose_metabolism_disease)

* Henoch-Schoenlein Purpura, also known as henoch-schonlein purpura, is related to amebiasis and arteries, anomalies of. An important gene associated with Henoch-Schoenlein Purpura is VCAM1 (Vascular Cell Adhesion Molecule 1), and among its related pathways/superpathways are Innate Immune System and Selenium Micronutrient Network. The drugs Prednisone and Prednisolone phosphate have been mentioned in the context of this disorder. Affiliated tissues include skin, kidney and testes, and related phenotypes are nausea and vomiting and arthralgia. A hypersensitivity vasculitis that is characterized by purpura (purplish plaques), arthralgia, gastrointestinal upset, and/or glomerulonephritis, and may be related to increased immune response following an infection.
(https://www.malacards.org/card/henoch_schoenlein_purpura)

* Hypertrophic Cardiomyopathy, also known as cardiomyopathy, hypertrophic, familial, is related to cardiomyopathy, familial hypertrophic, 1 and cardiomyopathy, familial hypertrophic, 6. An important gene associated with Hypertrophic Cardiomyopathy is

TNNI3 (Troponin I3, Cardiac Type), and among its related pathways/superpathways are Hypertrophic cardiomyopathy (HCM) and Aldosterone synthesis and secretion. The drugs Spironolactone and Ranolazine have been mentioned in the context of this disorder. Affiliated tissues include heart, testes and brain, and related phenotypes are Increased shRNA abundance and cardiovascular system. A condition in which a portion of the heart becomes thickened without an obvious cause. This results in the heart being less able to pump blood effectively. Symptoms vary from none to feeling tired, leg swelling, and shortness of breath. It may also result in chest pain or fainting. Complications include heart failure, an irregular heartbeat, and sudden cardiac death.
(https://www.malacards.org/card/hypertrophic_cardiomyopathy)

* Infiltrating Angiolipoma, also known as angiolipoma, infiltrating, is related to angiolipoma and ring chromosome 7. An important gene associated with Infiltrating Angiolipoma is VEGFC (Vascular Endothelial Growth Factor C), and among its related pathways/superpathways are GPCR Pathway and Cellular Senescence (REACTOME). Affiliated tissues include bone, lung and liver, and related phenotypes are cardiovascular system and immune system. A large intramuscular vessel haemangioma in which muscle mass gets replaced by fat tissue.
(https://www.malacards.org/card/infiltrating_angiolipoma)

* Infiltrating Lipoma, also known as intramuscular lipoma, is related to lipomatosis, multiple and pleomorphic lipoma. An important gene associated with Infiltrating Lipoma is NFIB (Nuclear Factor I B). Affiliated tissues include tongue, colon and spinal cord, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A variant of lipoma that infiltrates adjacent tissues and tends to recur after excision.
(https://www.malacards.org/card/infiltrating_lipoma)

* Localized Scleroderma, also known as morphea, is related to fasciitis and keloids, and has symptoms including pruritus and exanthema. An important gene associated with Localized Scleroderma is MMP1 (Matrix Metallopeptidase 1), and among its related pathways/superpathways are Cytokine Signaling in Immune system and PAK Pathway. The drugs Lidocaine and Vaccines have been mentioned in the context of this disorder. Affiliated tissues include skin, lung and breast, and related phenotypes are hyperpigmentation of the skin and hypopigmentation of the skin. A form of scleroderma that involves isolated patches of hardened skin on the face, hands, and feet, or anywhere else on the body, with no internal organ involvement.
(https://www.malacards.org/card/localized_scleroderma)

* Miliaria (update), also known as eccrine miliaria, is related to miliaria rubra and fox-fordyce disease, and has symptoms including exanthema An important gene associated with Miliaria is TSPAN7 (Tetraspanin 7), and among its related pathways/superpathways are Response to elevated platelet cytosolic Ca2+ and Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers. The drugs Vaccines and Immunologic Factors have been mentioned in the context of this disorder. Affiliated tissues include skin, eye and liver, and related phenotypes are digestive/alimentary and

hematopoietic system. Also called "sweat rash", is a skin disease marked by small and itchy rashes due to sweat trapped under the skin by clogged sweat gland ducts. Miliaria is a common ailment in hot and humid conditions, such as in the tropics and during the summer season.
(https://www.malacards.org/card/miliaria)

* Mitochondrial Disorders, also known as mitochondrial diseases, is related to myoclonic epilepsy associated with ragged-red fibers and chronic progressive external ophthalmoplegia, and has symptoms including muscle weakness, myalgia and muscle cramp. An important gene associated with Mitochondrial Disorders is DGUOK (Deoxyguanosine Kinase), and among its related pathways/superpathways are Metabolism and Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins.. The drugs Bupropion and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include liver, kidney and brain, and related phenotypes are Increased shRNA abundance (Z-score > 2) and Increased shRNA abundance (Z-score > 2). A group of disorders caused by dysfunctional mitochondria, the organelles that generate energy for the cell. Mitochondria are found in every cell of the human body except red blood cells, and convert the energy of food molecules into the ATP that powers most cell functions.
(https://www.malacards.org/card/mitochondrial_disorders)

* Mycosis Fungoides, also known as mycosis fungoides lymphoma, is related to cutaneous t cell lymphoma and sezary's disease. An important gene associated with Mycosis Fungoides is CD28 (CD28 Molecule), and among its related pathways/superpathways are Innate Immune System and ERK Signaling. The drugs Arzerra and Bromfenac have been mentioned in the context of this disorder. Affiliated tissues include t cells, skin and bone, and related phenotypes are pruritus and dry skin. A disease in which T-celllymphocytes (a type of white blood cell) become malignant (cancerous) and affect the skin. This condition is one of the most common types of T-cell lymphoma.
(https://www.malacards.org/card/mycosis_fungoides)

* Oppositional Defiant Disorder is related to depression and anxiety, and has symptoms including photophobia, restlessness and personality changes. An important gene associated with Oppositional Defiant Disorder is DRD4 (Dopamine Receptor D4), and among its related pathways/superpathways are Circadian entrainment and Transmission across Chemical Synapses. The drugs Risperidone and Dopamine have been mentioned in the context of this disorder. Affiliated tissues include brain, testes and eye, and related phenotypes are behavior/neurological and homeostasis/metabolism. A specific developmental disorder that is characterized by a pattern of angry mood, defiant behavior and vindictiveness in children and adolescents.
(https://www.malacards.org/card/oppositional_defiant_disorder)

* Paronychia (update), also known as paronychia inflammation, is related to candidal paronychia and neuropathy, hereditary sensory and autonomic, type iia. An important gene associated with Paronychia is EGFR (Epidermal Growth Factor Receptor), and

among its related pathways/superpathways are ERK Signaling and Akt Signaling. The drugs Irinotecan and Phylloquinone have been mentioned in the context of this disorder. Affiliated tissues include skin, bone and testes, and related phenotypes are Decreased viability and Decreased viability. A nail disease characterized by often-tender bacterial or fungal hand infection or foot infection due to either bacteria or fungus (Candida albicans) where the nail and skin meet at the side or the base of a finger or toe nail.
(https://www.malacards.org/card/paronychia)

* Peptic Ulcer Perforation, also known as perforated peptic ulcer, is related to peptic ulcer disease and diclofenac allergy. An important gene associated with Peptic Ulcer Perforation is ATP12A (ATPase H+/K+ Transporting Non-Gastric Alpha2 Subunit), and among its related pathways/superpathways are L1CAM interactions and Salivary secretion. The drugs Clopidogrel and Aspirin have been mentioned in the context of this disorder. Affiliated tissues include testes, colon and neutrophil, and related phenotypes are Decreased caspase 3/7 activity and digestive/alimentary. Penetration of a Peptic Ulcer through the wall of duodenum or stomach allowing the leakage of luminal contents into the peritoneal cavity.
(https://www.malacards.org/card/peptic_ulcer_perforation)

* Peritonitis, also known as retractile mesenteritis, is related to primary peritoneal carcinoma and tuberculous peritonitis. An important gene associated with Peritonitis is TMEM67 (Transmembrane Protein 67), and among its related pathways/superpathways are Innate Immune System and TGF-Beta Pathway. The drugs Ertapenem and Mupirocin have been mentioned in the context of this disorder. Affiliated tissues include colon, kidney and neutrophil, and related phenotypes are Synthetic lethal with MLN4924 (a NAE inhibitor) and Synthetic lethal with MLN4924 (a NAE inhibitor). Peritonitis is inflammation of the peritoneum, the lining of the inner wall of the abdomen and cover of the abdominal organs.
(https://www.malacards.org/card/peritonitis)

* Polysubstance Abuse, also known as polysubstance abuse, susceptibility to, is related to substance dependence and pathological gambling. An important gene associated with Polysubstance Abuse is FAAH (Fatty Acid Amide Hydrolase), and among its related pathways/superpathways are Circadian entrainment and Monoamine GPCRs. The drugs Cocaine and Peripheral Nervous System Agents have been mentioned in the context of this disorder. Affiliated tissues include brain, heart and b cells, and related phenotypes are behavior/neurological and homeostasis/metabolism. A patterned use of more than one drug in which the user consumes the substance in amounts or with methods which are harmful.
(https://www.malacards.org/card/polysubstance_abuse)

* Primary Systemic Mycosis is related to sporotrichosis and coccidioidomycosis. An important gene associated with Primary Systemic Mycosis is CLEC7A (C-Type Lectin Domain Containing 7A), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. Affiliated tissues include t cells, skin and bone, and related phenotypes are Increased shRNA abundance (Z-score > 2) and

Increased shRNA abundance (Z-score > 2). A systemic mycosis that results in infection located in human body, has material basis in Fungi, which can overcome the physiological and cellular defences of the normal human host. The primary deep pathogens usually gain access to the host via the respiratory tract.
(https://www.malacards.org/card/primary_systemic_mycosis)

* Respiratory Allergy, also known as airway allergy, is related to pollen allergy and sinusitis. An important gene associated with Respiratory Allergy is IL5 (Interleukin 5), and among its related pathways/superpathways are Innate Immune System and PEDF Induced Signaling. The drugs Fluticasone and Hydrocortisone have been mentioned in the context of this disorder. Affiliated tissues include testes, skin and t cells, and related phenotypes are hematopoietic system and homeostasis/metabolism. A hypersensitivity reaction type I disease located in the respiratory tract.
(https://www.malacards.org/card/respiratory_allergy)

* Scorpion Envenomation is related to cardiogenic shock and acute respiratory distress syndrome. An important gene associated with Scorpion Envenomation is IL6 (Interleukin 6), and among its related pathways/superpathways are Cytokine Signaling in Immune system and PAK Pathway. The drugs Prazosin and Midazolam have been mentioned in the context of this disorder. Affiliated tissues include heart, brain and bone. A wide range of clinical manifestations that are mostly attributed to the activation of the autonomic nervous system by scorpion venom toxins.
(https://www.malacards.org/card/scorpion_envenomation)

* Systemic Scleroderma, also known as scleroderma, is related to diffuse cutaneous systemic sclerosis and crest syndrome, and has symptoms including pruritus, exanthema and hidebound skin. An important gene associated with Systemic Scleroderma is TSIX (TSIX Transcript, XIST Antisense RNA), and among its related pathways/superpathways are Cell adhesion molecules (CAMs) and Photodynamic therapy-induced NF-kB survival signaling. The drugs Bosentan and Sodium Citrate have been mentioned in the context of this disorder. Affiliated tissues include skin, testes and endothelial, and related phenotypes are muscle weakness and nausea and vomiting. A rheumatic disease and collagen disease that involves the abnormal growth of connective tissue, which supports the skin and internal organs.
(https://www.malacards.org/card/systemic_scleroderma)

* T Cell Deficiency, also known as t lymphocyte immunodeficiency, is related to immunodeficiency, x-linked, with magnesium defect, epstein-barr virus infection, and neoplasia and immune defect due to absence of thymus. An important gene associated with T Cell Deficiency is CD247 (CD247 Molecule), and among its related pathways/superpathways are Allograft rejection and Immune response NFAT in immune response. The drugs Fludarabine and Busulfan have been mentioned in the context of this disorder. Affiliated tissues include t cells, b cells and thymus, and related phenotypes are cellular and hematopoietic system. A deficiency of T cells, caused by decreased function of individual T cells, it causes an immunodeficiency of cell-mediated immunity. T cells normal function is to help with the human body's immunity, they are

one of the two primary types of lymphocytes (the other being B cells).
(https://www.malacards.org/card/t_cell_deficiency)

1.3.3 Tradicional Chinese Medicine

These recordings integrate Traditional Chinese Medicine (TCM) herbs through a unique audio-alchemical process. For each herb, the molecular weights of its bioactive compou nds are compiled into a singular, non-redundant sum.

This cumulative value is then converted into a corresponding frequency in Hertz (Hz), re flecting the herb's biochemical signature in sonic form.

The individual Hz values of all herbs required for a specific TCM formula are then harmo nically combined, creating a composite frequency blend.

This blend is algorithmically woven into a musical composition, where the therapeutic pr operties of the herbs are expressed through structured sound.

The resulting fusion bridges ancient herbal wisdom with modern computational music, o ffering an immersive, frequency-based representation of TCM's healing principles.

1.3.3.1 RT-TCM

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM

Ba Wei Di Huang Wan, Bi Yu San, Bu Wang San, Da Huang Mu Dan (Pi) Tang, Shi Wei San, Si Miao Yong An Tang, Si Ni Tang, Xiang Bin, Yi Yi Ren Tang

Recordings Updated in May 2025

* BA WEI DI HUANG WAN - 八味地黄丸 - Eight-Ingredient Formula With Rehmannia

ACTIONS - Warms and Tonifies Kidney Yang.

SYNDROMES - Kidney Yang Deficiency. Leg Qi. Tan Yin. Xiao Ke. Jin Ye Stasis. Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency.

CLINICAL MANIFESTATIONS - Aversion to Cold. Watery stools with undigested food.

Lower back pain. Weakness of the lower extremities. A cold sensation in the lower half of the body. Tenseness in the lower abdomen. Pain and cramps in the lower abdomen. Panting and irritability to the point of having difficulty lying down. Will breathe most comfortably while leaning against something. Nocturia. May be numbness in the lower abdomen. Urinary difficulty with edema or Spasmodic pain in the lower abdomen. Excessive urination. If severe, may be incontinence of urine. May have persistent diarrhea. Dizziness. Vertigo. Dysuria. May have flushed face (Yang floating upward). Thirst with frequent, copious urination (Xiao Ke). Fatigue (severe). May have severe perspiration (Yang floating upward). Constipation. Lassitude. Pale face. Edema of the face and feet. Severe edema of the legs (may prevent walking). Maybe cough. Maybe asthma.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency with dry mouth and throat and a red tongue with no coat. Use with caution for those with gastrointestinal weakness. Contraindicated for those with marked ascites. Contraindicated for those with frequent diarrhea. Contraindicated for those with facial flushing with fever. Contraindicated during pregnancy. This formula may be effective in treating side effects and adverse reactions, including dizziness, weight gain, perspiration and emotional disturbances associated with long-term prednisone use.

NOTES - Jin Gui Shen Qi Wan uses Ram. Cinnamomi Gui Zhi. Ba Wei Di Huang Wan uses Cx Cinnamomi Rou Gui.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Yin and Blood and tonifies the Kidneys. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Rou Gui, for Kidney Yang Deficiency.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops Excess perspiration. With Shan Yao, tonifies the Liver and benefits the Spleen.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Zi - Tonifies the Ming Men, dispels Cold, eliminates Dampness and tonifies Kidney Yang. With Gui Zhi, assists Yang and enhances water metabolism. With Shu Di Huang and Rou Gui, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and sore back and legs, impotence, and urinary frequency.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens Yang and Ming Men Fire, disperses deep Cold, warms the channels, unblocks the channels and vessels, alleviates pain, leads the Fire back to its source and assists the generation of Qi and Blood. With Fu Zi, powerfully tonifies Kidney Yang, for Kidney Yang Deficiency with lower back pain and weakness in the legs and knees and Deficiency of Ming Men Fire

with impotence or infertility.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination, strengthens the Spleen and drains Dampness, enabling Gui Zhi to warm the Bladder.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Gui Zhi, warms and transforms the Fluids, unblocks Yang and promotes urination.

-Mu Dan Pi - Clears Heat and Deficiency Fire, cools and harmonizes the Blood, invigorates the Blood and dispels Blood Stasis.

TREATS
Chronic glomerulonephritis. Chronic interstitial nephritis. Chronic diffuse nephritis. Chronic urethritis. Diabetes mellitus. Diabetes insipidus. Primary hyperaldosteronism. Hypothyroidism. Neurasthenia. Arthritis. Beriberi. Chronic bronchial asthma. Chronic bronchitis. COPD. Urinary retention. Climacteric syndrome. Epstein Barr Virus. Chronic Functional Immuno-Deficiency Syndrome (CFIDS). Spermatorrhea. Pyelitis. Pyelonephritis. Albuminuria. Prostate cancer. Addison’s Disease. Cystitis. Neuralgia. Postpartum dysuria. Nephroatrophy. Urinary incontinence. Cataract. Keratosis. Keratitis. Numbness of the legs. Infertility. Benign prostatic hypertrophy. Postpartum urinary retention. Vitreous opacity. Meniere’s disease. Neurogenic tinnitus. Periodontal disease. Dysmenorrhea. Gynecomastia. Vesicle calculus. Anuria. Nocturia. Coronary artery disease. Lumbago. Irregular menstruation. Metrorrhagia. Panarthralgia. Nephrotic syndrome. Hyperglycemia. Alopecia. Proteinuria. Arteriosclerosis. Dysentery. Dizziness. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Polyuria. Hematuria. Hay fever. Addison’s disease. Constipation. Dermatitis. Somnolence. Tinnitus. Low back pain. Anorexia. Fatigue. Facial and ankle edema. Nausea/Vomiting. Epistaxis. Oral leukoplakia. Dyspnea. Gingivitis. Dysuria during pregnancy. Rheumatoid arthritis. Sjogren's syndrome. Prematurely gray hair. Vaginal discharge. Macular degeneration. Emphysema. Asthma. Bronchitis. Chronic rhinitis. Chronic tonsillitis. Post-surgical urinary incontinence. Urinary retention from spinal cord injuries. Renal tuberculosis. Perimenopausal syndrome. Leg Qi. Menopause syndrome. Nephrosclerosis. Nephrotuberculosis. Cystolithiasis. Cystic tuberculosis. Senile cystoatrophy. Prostamegaly. Cerebral hemorrhage. Arteriosclerosis. Hypotension. Forgetfulness. Hypertension. Nephrolithiasis. Urolithiasis. Impotence. Amenorrhea. Inappropriate erection. Premature ejaculation. Sciatica. Deformed vertebrae. Glaucoma. Eczema. Tinea. Senile itching. Urticaria. Thirst. Rectoptosis. Fever in the head and extremities. Chronic gonorrhea. Poor vision. Senile dementia. Vegetative nerve disturbance. Paralysis of the detrusor muscle. Recurrent aphthous ulcers. Proteinuria. Endocrine disorders. Arteriostenosis. Prostatitis. Scanty menstruation. Obesity. Premenstrual syndrome. Hashimoto's thyroiditis. Stroke. Headache. Hyperaldosteronism. Optic atrophy. Vertigo. Atrophy (Wei) Syndrome. Spontaneous perspiration. Hysterical paralysis. Periodic paralysis. Facial paralysis.

Acute infectious multiple neuritis. Stomach cancer. Oliguria with edema. Chronic renal failure. AIDS/HIV. Cor pulmonare. Amyotrophic lateral sclerosis (ALS). Narcolepsy. Diarrhea. Knee pain. Chronic pancreatitis. Weakness. Yawning. Chronic enteritis. Enuresis. Palpitations. Rectal prolapse. Metrorrhagia. Periodontitis. Edema during pregnancy. Upper back pain. Neck pain and stiffness. Systemic lupus erythematosus. Vaginitis. Sore throat.

* BI YU SAN - 碧玉散 - Jasper Formula

ACTIONS - Clears Heat. Relieves toxicity. Promotes urination. Eliminates Summerheat. Tonifies Qi. Cools the Blood. Arrests convulsion.

SYNDROMES - Summerheat and Dampness with Liver and Gallbladder Heat. Urinary Bladder Damp-Heat.

CLINICAL MANIFESTATIONS - Red eyes. Sore throat. Mouth, tongue and lip ulcerations. Urinary difficulty. Diarrhea. Papules. Sores. Prickly Heat. Ocular pain. Dark urine. Chest pain. Hemoptysis. Epistaxis. Hematemesis. Oliguria with dark urine. Scanty urine. Swelling of the throat. Fever. Thirst. Irritability. Nausea. Vomiting. Lassitude due to Summerheat.

HERBS AND ACTIONS

-Hua Shi - Promotes urination, drains Heat from the Urinary Bladder, releases Summeheat and resolves Dampness. With Gan Cao, for Summerheat causing painful urinary dysfunction, thirst, irritability, and fever.

-Gan Cao - Clears Heat and relieves Fire toxicity.

-Qing Dai - Clears Heat, resolves Fire toxicity, cools the Blood, disperses Stagnation, reduces swelling, drains Liver Fire and dispels Summerheat.

TREATS

Pertussis. Infantile diarrhea. Urethritis. Urinary tract infection. Gastroenteritis. Cystitis. Nephrolithiasis. Epistaxis. Hematemesis. Pharyngitis. Epilepsy. Mumps. Aphthae. Urolithiasis. Allergies. Stomach flu. Heat stroke. Blepharitis. Conjunctivitis. Stomatitis. Epidemic eruption. Red eyes.

* BU WANG SAN - 不忘散 - Powder For Memory Loss

ACTIONS - Calms the Spirit. Sedates the Heart. Expels Phlegm. Opens the Orifices. Strengthens the Spleen. Tonifies Qi.

SYNDROMES - Forgetfulness due to aging.

CLINICAL MANIFESTATIONS - Forgetfulness. Constipation. Excess thirst. Dry mouth and/or throat. Dry skin. Chronic cough (usually dry). Night sweats. Fatigue.

HERBS AND ACTIONS

-Yuan Zhi - Calms the Spirit, sedates the Heart, clears the channel joining the Heart and Kidneys, expels Phlegm and opens the Orifices. With Ren Shen, Fu Ling and Shi Chang Pu, for forgetfulness.

-Ren Shen - Powerfully tonifies Yuan Qi, tonifies Spleen, Lung, Heart and Stomach Qi and calms the Spirit.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. Quiets the Heart, calms the Spirit and soothes the nerves.

-Shi Chan Pu - Opens the Orifices, vaporizes Phlegm, removes filth, calms the Spirit and disperses Wind. With Yuan Zhi, for forgetfulness, tinnitus and impaired hearing. With Ren Shen, Fu Ling and Yuan Zhi, for forgetfulness and dulled senses.

TREATS - Forgetfulness.

* DA HUANG MU DAN (PI) TANG - 大黄牡丹皮湯 - Rhubarb And Moutan Formula

ACTIONS - Drains Heat. Breaks up Blood Stasis. Invigorates the Blood. Disperses nodules. Reduces swelling.

SYNDROMES - Early Stage Intestinal Abscess. Heat and Blood Stagnation.

CLINICAL MANIFESTATIONS - Lower abdominal distention and pain (usually on right). Pain increases on pressure with rebound tenderness. Guarding of the abdominal musculature. Groin pain resembling urinary dysfunction without urinary difficulty. Groin pain relieved by flexing hip and knee. Groin pain intensified by extending hip. Perspiration. Irregular or intermittent fever followed by chills and perspiration. May be mass in lower right quadrant of abdomen. Aversion to Cold. Hard lumps.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with necrotic appendicitis. Contraindicated for those with appendicitis with peritonitis. Contraindicated for infants with appendicitis. Contraindicated for those with appendicitis due to parasites. Contraindicated during Pregnancy. Use extreme caution in the weak and elderly.

NOTES - Before pus is formed, the pain is severe with localized hardness and Heat. When fully formed, the Heat and pain diminish, the tissues are more relaxed and the

pulse is tight.

HERBS AND ACTIONS

-Da Huang - Drains Heat and breaks up Blood Stasis.

-Mang Xiao - Purges, softens hardness, eliminates stagnation, clears Heat and moistens Dryness. With Da Huang, for constipation due to Stomach and Intestinal Heat.

-Mu Dan Pi - Cools Blood, clears Heat and eliminates masses due to Blood Stasis. With Da Huang, for unsuppurated abdominal abscess with pain, constipation and low grade fever.

-Tao Ren - Breaks up Blood Stasis, invigorates Blood, moistens Intestines and unblocks bowels. With Da Huang, for severe abdominal infection. With Da Huang and Mang Xiao, for Intestinal Abscess with pain and swelling.

-Dong Gua Ren - Expels pus, eliminates Heat and reduces abscesses, especially in the Intestines. With Da Huang and Mu Dan Pi, for Intestinal Abscess.

TREATS

Acute uncomplicated appendicitis. Mesenteric lymphadenitis. Ruptured appendicitis with peritonitis. Chronic appendicitis. Lochioschesis. Pelvic inflammatory disease. Infection after vasectomy. Adnexitis. Periproctitis. Colitis. Proctitis. Hemorrhoids. Perimetritis. Diverticulitis. Renal abscess. Pulmonary abscess. Pyelonephritis. Conjunctivitis. Abdominal or lower extremity folliculitis. Primary dysmenorrhea. Amenorrhea. Chronic prostatitis. Rectal prolapse. Urolithiasis. Prostatic hypertrophy. Anorexia. Salpingitis. Enuresis. Puerperal fever. Periappendicular abscess. Vaginal discharge. Acute cholecystitis. Testitis. Peritonitis. Pyelitis. Cystitis. Eczema. Ulcerative enteritis. Gonorrhea. Leukorrhea. Ureteraliths. Iliac fossa abscess. Subdermal abscess. Hepatic abscess. Bacterial dysentery. Mastitis. Osteomyelitis. Blocked uterine tubes. Cerebral thrombosis. Benign prostatic hypertrophy. Suppurative tonsillitis. Colitis. Incarcerated internal hemorrhoids. Abdominal pain. Nausea/Vomiting. Constipation. Diarrhea. Intestinal obstruction. Trichomonas. Ulcerative colitis. Vaginitis. Lower abdominal masses.

* SHI WEI SAN - 石韦散 - Pyrrosia Formula

ACTIONS - Promotes urination. Eliminates urinary calculi.

SYNDROMES - Urinary Bladder Damp-Heat. Stone Lin. Urinary calculi.

CLINICAL MANIFESTATIONS - Burning urinary pain. Frequent urination. Urgent urination. Yellowish red, turbid urine. Small stones in the urine. Sudden discontinuation

of urination. Subtle pain in the lower abdomen and low back.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy.

HERBS AND ACTIONS

-Shi Wei - Clears Damp-Heat, unblocks Lin, clears stones and stops bleeding. With Qu Mai and Hua Shi, for painful urination due to Damp-Heat in the Lower Jiao. With Qu Mai, Hua Shi and Dong Kui Zi, for hematuria. With Pu Huang, for Blood Lin with stabbing pain. With Che Qian Zi and Qu Mai, for Heat Lin.

-Mu Tong - Promotes urination. With Dong Kui Zi, for urinary frequency, pain and difficulty. With Che Qian Zi, for Lin Syndrome and Heart Fire Transferring to the Small Intestine channel causing edema and painful urinary dysfunction.

-Che Qian Zi - Promotes urination and clears Heat. With Dong Kui Zi, for urinary calculi. With Mu Tong and Huan Shi, for Lin Syndrome.

-Qu Mai - Promotes urination, drains Damp-Heat from Urinary Bladder, unblocks Lin and breaks up Blood Stasis. With Che Qian Zi and Huan Shi, for Heat dysuria (Re Lin) with burning and pain during urination.

-Dong Kui Zi - Promotes urination and unblocks Lin. With Mu Tong, for Damp-Heat in the Lower Jiao and pediatric Lin.

-Hua Shi - Promotes urination, drains Heat from Urinary Bladder, expels Damp-Heat through the urine and aids movement of gravel and stones. With Dong Kui Zi, for Damp-Heat in the Lower Jiao causing urinary discomfort and dysfunction. With Gan Cao, for Summerheat causing painful urinary dysfunction, thirst, irritability, and fever. With Mu Tong, for Heat Lin.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Urolithiasis. Cystitis. Urethritis. Gallstones. Glaucoma with ciliary congestion. Hemophilia. Low back pain. Urinary tract infection. Acute nephritis. Prostatitis. All kinds of calculi. Hematuria. Oliguria. Polyuria. Enuresis. Strangury.

* SI MIAO YONG AN TANG - 四妙勇安湯 - Four-valient Formula For Well Being. Formula of Four Wonderful Herbs for Quick Restoration of Health. Formula for Thromboangitis with Four Effective Ingredients.

ACTIONS - Clears Heat. Resolves toxicity. Nourishes Yin. Invigorates the Blood.

Alleviates pain.

SYNDROMES - Fire Toxin leading to Blood Stasis in the sinews and Blood vessels.

CLINICAL MANIFESTATIONS - Ulcerated sores that do not heal on a limb that is dark red. Slightly swollen and warm to the touch. There may me a rotten smell to the lesion. Gangrene of the extremities, especially the fingers and toes with purulent abscess. Extreme pain. Local inflammation and swelling. There may be copious discharge of pus from the ulcers. A burning sensation. Fever. Thirst.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Cold, Qi Deficiency or Blood Deficiency. Avoid scratching the affected area while taking this formula.

NOTES - This condition may be attributed to long standing Kidney Deficiency, Wind-Cold-Damp Bi, overindulgence in rich, greasy or spicy foods or improper use of Yang Tonics. More than one factor is usually involved.

HERBS AND ACTIONS

-Jin Yin Hua - Clears Heat and relieves toxicity. With Gan Cao, for toxic swellings and sores. With Gan Cao and Xuan Shen, for sloughing ulcers from Heat toxicity. With Dang Gui, reduces obstruction and toxicity for swollen, painful sores and necrosis of surrounding tissue.

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin, drains Fire and relieves toxicity. With Jin Yin Hua and Gan Cao, for boils, carbuncles and furuncles.

-Dang Gui - Nourishes, invigorates and harmonizes Blood, reduces swelling, expels pus, generates flesh and alleviates pain.

-Gan Cao - Clears Heat, relieves Fire toxicity, alleviates pain and moderates and harmonizes the properties of other herbs. With Jin Yin Hua, for Damp rashes or acne.

TREATS

Acute thrombotic phlebitis. Thromboangitis obliterans. Iliofemoral vein thrombosis. Chronic hepatitis. Viral hepatitis. Sciatica. Carpal tunnel syndrome. Erysipelas. Radio-dermatitis. Thrombophlebitis. Sloughing ulcer. Gangrene. Arterosclerotic gangrene. Chronic gastritis. Benign prostatic hypertrophy. Gout. Varicose veins of the lower limbs. Vascular Bi. Cirrhosis of the Liver. Erythema nodosum.

* SI NI TANG - 四逆湯 - Frigid Extremities Formula. Formula to Treat Cold Limbs. Aconite, Ginger and Licorice Combination.

ACTIONS - Rescues Yang. Warms the Middle Jiao. Disperses Internal Cold. Stops diarrhea.

SYNDROMES - Heart Yang Deficiency Exhaustion: Yang Xu Jue Ni. Kidney Yang Deficiency with Internal Cold. Shao Yin Cold. Yang Ming Han. Excess use of diaphoretics in Tai Yang Stage leading to loss of Yang.

CLINICAL MANIFESTATIONS - Extremely cold extremities. Aversion to Cold. Sleeping with knees drawn up. Lethargy with a constant desire to sleep. Vomiting. Diarrhea with undigested food. Abdominal pain and Cold. Lack of thirst. Coma. Indigestion. Edema. Pale face. Superficial fever. Red face. Cyanosis of the lips and nails. Sepsis.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with True Heat with False Cold (C.M.: cold extremities, thirst with a desire for cold drinks, dark urine. Stop this formula immediately once the hands and feet have warmed up.

HERBS AND ACTIONS

-Fu Zi - Warms the Kidney and Heart Yang, stimulates exhausted Yang, warms the Ming Men Fire and the entire body by traveling through all twelve channels. With Gan Jiang, strengthens the Kidney and Spleen Yang,warms the Spleen and Kidneys, disperses Cold and treats overabundance of Yin fluids due to Deficiency Cold, Devastated Yang and debilitated Spleen and Kidney Yang with incessant diarrhea. With Gan Jiang and Zhi Gan Cao strengthens the actions of fortifying Qi and benefiting the Yang for Cold extremities and diarrhea with undigested food due to Collapse of the Spleen and Kidney Yang.

-Gan Jiang - Warms the Middle Jiao and Lungs, transforms thin mucus, expels Cold, rescues Yang, warms the channels (unblocks the pulse) and stops bleeding. With Zhi Fu Zi, for Cold-Damp Bi. With Zhi Gan Cao, for epigastric pain and vomiting due to Spleen and Stomach Deficiency Cold and detoxifies Zhi Fu Zi.

-Gan Cao - Tonifies Qi, strengthens the Spleen and moderates the drying properties of the formula.

TREATS

Acute myocardial infarction. Cardiac insufficiency. Hypopituitarism. Vomiting and diarrhea due to acute and chronic gastroenteritis. Hypothyroidism. Cerebrovascular insufficiency. Acute gastroenteritis. Cirrhosis of the Liver. Chronic prostatitis. Intoxication. Arthritis. Influenza. Constipation. Abdominal pain. Palpitations. Fatigue. Chronic nephritis. Congestive Heart failure. Perspiration on the extremities. Dyspnea. Painful obstruction. Adrenal insufficiency. Edema. Intractable arthritis. Cholera. Jaundice. Intestinal Heat. Shock. Chronic colitis. Functional uterine bleeding. Recurrent aphthous ulcers. Gastroptosis. Common cold. Cough. Nausea/Vomiting. Diarrhea.

Anorexia. Weakness. Chronic renal failure. Spontaneous perspiration. Indigestion. Dysmenorrhea.

* XIANG BIN - 香槟 - Recovery of Gastrointestinal Function

Qi deficiency and Qi stagnation, in Chinese medicine.

Accelerate the recovery of bowel function. Promotes the production of body fluids and has a tranquilizing effect.

Ginseng oligopeptides (GOP), small-molecular oligopeptides isolated from ginseng, have been proven to have anti-fatigue effects. A. catechu L. (Binlang) has the function in Chinese medicine of promoting the circulation of Qi, and there is evidence that, one of its components, arecoline, affects gastrointestinal motility by direct binding to M receptors. P. persica Batsch (Taoren) has the function in Chinese medicine of improving blood circulation and relaxing the bowels and there is evidence that its extract can lower blood viscosity. L. aggregata Kosterm (Wuyao) has the function in Chinese medicine of promoting Qi circulation to relieve pain and one of its components. Total alkaloids have anti-inflammatory and analgesic effects. F. amomi (Sharen) has the functions in Chinese medicine of removing dampness to restore the normal function of the stomach, while its water extract has a role in promoting gastrointestinal peristalsis. This combination of herbs is used in some chinese hospitals to speed up recovery of gasrtrointestinal surgery patients.

XBP is a compound of Panax ginseng (Renshen), Areca catechu L. (Binlang), Prunus persica Batsch (Taoren), Lindera aggregata Kosterm (Wuyao), and Fructus amomi (Sharen).

* YI YI REN TANG - 薏苡仁湯 - Coicis Formula

ACTIONS - Dispels Wind and Dampness. Benefits Qi. Invigorates Blood circulation. Reduces swelling. Moistens dry Blood. Tonifies Blood. Warms the Channels. Relieves spasms. Relieves muscular tension.

SYNDROMES - Wind-Cold Damp Bi with Dampness Predominant. Wind-Damp Bi with Blood Deficiency. Atrophy disorder (Wei Syndrome) due to Damp-Heat.

CLINICAL MANIFESTATIONS - Numbness and pain of the extremities. Joint swelling and pain, especially hands and feet. Heaviness of joints. Numbness of the joints. Stiffness of the joints. Fever. Heaviness of the body. Coldness of the body. Dizziness. Likes pressure. Fatigue. Pale complexion. Preference for warmth. Swelling, pain, numbness and stiffness of the joints. Skin cornification.

NOTES - This formula is commonly used for Bi Syndrome that does not respond to

treatment or was improperly treated at the acute stage and is becoming chronic.

HERBS AND ACTIONS

-Ma Huang - Releases the Exterior, disperses Cold, promotes urination and reduces edema. With Gui Zhi -For Wind-Cold excess conditions with fever and chills but no sweat and Wind-Cold-Damp Bi.

-Gui Zhi - Releases external Wind-Cold from the muscle layer. harmonizes the Ying and Wei, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang and transforms the Qi and warms and facilitates the flow of Blood through the vessels. With Bai Shao -For external Wind-Cold with disharmony between the Ying and Wei, with spontaneous sweating.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Zhi Gan Cao -moderates spasms and relieves abdominal pain.

-Bai Shao - Alleviates pain, nourishes Blood, astringes Yin and adjusts the Ying and Wei. With Dang Gui Nourishes Yin and Blood.

-Cang Zhu with Hei Zhi Ma - Strongly dries Dampness, tonifies the Spleen, expels Wind-Dampness, clears Dampness from the Lower Jiao and releases the Exterior, Nourishes and fortifies Liver and Kidney Yin, nourishes Jing and Blood and extinguishes Wind.

-Bai Zhu - Tonifies the Spleen and augments Qi, dries Dampness and promotes water metabolism, stabilizes the Exterior and stops sweating.

-Yi Yi Ren - Promotes urination, leaches out Dampness, strengthens the Spleen, clears Heat, expels pus, expels Wind-Dampness and soothes numbness. With Ma Huang, Gui Zhi and Cang Zhu, for Wind-Damp Bi.

-Gan Cao - Alleviates pain and moderates and harmonizes the properties of other herbs.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold and reduces the toxicity of other herbs. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis. With Ma Huang, strongly creates sweating to treat all externally contracted Wind-Cold disorders.

TREATS

Arthritis. Rheumatism. Apoplexy. Arthralgia. Chronic fever with swelling of the extremities. Polyrheumatism. Genital warts. Painful obstruction. Rheumatoid arthritis. Mucoid arthritis. Tubercular arthritis. Muscular rheumatism. Beriberi. Nephritis. Pulmonary edema. Numbness. AIDS/HIV. Fatigue. Toe pain. Hip pain. Atrophy (Wei)

Syndrome. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Pleurisy Paresthesia. Weakness. Low back pain. Gout.

1.3.3.2 RT-TCM-02

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_02

Da Xian Xiong Tang, Dang Gui Si Ni Tang, Er Long Zuo Ci Wan, Huang Lian Jie Du Tang, Huo Xue Hua Yu Er Hao Zhen Ji, Jia Wei Shen Qi Wan, Qing Xin Lian Zi Yin, Shao Yao Gan Cao Tang, Tao Hong Si Wu Tang.

Recordings Updated in May 2025

* DA XIAN XIONG TANG - 大陷胸汤 - Major Formula For Pathogens Stuck In The Chest

ACTIONS - Drains Heat. Purges Water Accumulation.

SYNDROMES - Heat and Water Accumulation in the chest.

CLINICAL MANIFESTATIONS - Fullness and hardness of the epigastrium and/or abdomen. Lower abdominal pain. Severe pain that becomes unbearable with the slightest pressure. Tidal fever at dusk. Shortness of breath. Severe constipation. Thirst. Irritability. Restlessness.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only for acute diseases. Use only long enough to achieve results. Contraindicated during pregnancy. Contraindicated for weak patients.

HERBS AND ACTIONS

-Gan Sui - Drains water downward and eliminates congested Fluids and thin mucus.

-Da Huang - Drains Heat, purges accumulations, transforms Dampness and promotes urination. With Gan Sui, for accumulation of pathogenic Heat and Fluids in the chest and upper abdomen. With Mang Xiao, eliminates obstruction in the Intestines for severe constipation with passage of liquid but no solid stool.

-Mang Xiao - Purges accumulations, guides out Stagnation, softens hardness, moistens Dryness, clears Heat and drains Fire.

TREATS

Acute pancreatitis. Acute cholecystitis. Acute obstructive cholangitis. Adhesive ileus. Paralytic ileus. Acute peritonitis. Acute Intestinal obstruction. Acute upper gastrointestinal perforations. Acute exudative pleurisy. Severe pneumonia. Pericardial effusions. Pediatric meningitis. Psychiatric disorders. Severe constipation.

* DANG GUI SI NI TANG - 當歸四逆湯 - Dang Gui Formula For Frigid Extremities

ACTIONS - Warms the Channels. Disperses Cold. Nourishes the Blood. Unblocks the Blood vessels.

SYNDROMES - Cold in the Channels due to Blood Deficiency. Jue Yin Cold.

CLINICAL MANIFESTATIONS - Long standing cold hands and feet that are cold to the touch and feel cold to the patient. Maybe lumbago and leg pain. Abdominal pain and distention. Midline pain. Uterine pain. Chills. Diarrhea. Menstrual abdominal pain. Maybe chest pain. Increased sweating, particularly of the feet. Increased salivation. Long standing cold hands and feet that are cold to the touch and feel cold to the patient. Maybe lumbago and leg pain. Abdominal pain and distention. Midline pain. Uterine pain. Chills. Diarrhea. Menstrual abdominal pain. Maybe chest pain. Increased sweating, particularly of the feet. Increased salivation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency with Empty Fire. Use with caution during Spring and Summer or in warm climates.

HERBS AND ACTIONS

-Dang Gui - Tonifies Blood, regulates menstruation, invigorates and harmonizes Blood and disperses Cold. With Bai Shao, regulates and harmonizes Qi and Blood. With Bai Shao, Gui Zhi and Xi Xin, for Blood and Yang Deficiencies with cold extremities, back and/or buttocks. With Zhi Gan Cao, moderates spasms and relieves abdominal pain.

-Bai Shao - Nourishes Blood, regulates menstruation and adjusts the Ying and Wei. With Zhi Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews, treats abdominal pain due to disharmony between the Liver and Stomach, epigastric, hypochondriac or flank pain and muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency.
With Gui Zhi, harmonizes Ying and Wei in Tai Yang Zhong Feng. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Da Zao, for Wind-Cold with Deficiency and

perspiration.

-Gui Zhi - Releases the exterior, adjusts the Ying and Wei, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang and transforms the Qi, warms and facilitates the flow of Yang Qi in the chest and warms and facilitates the flow of Blood through the vessels. With Bai Shao, warms and tonifies the Middle Jiao. With Zhi Gan Cao, for palpitations and shortness of breath due to injured Yang of the chest.

-Xi Xin - Releases Exterior Wind and Cold, disperses Internal Cold, warms the Lungs and alleviates pain.

-Zhi Gan Cao - Alleviates pain and moderates and harmonizes the properties of other herbs.

-Da Zao - Nourishes Blood and moderates and harmonizes the harsh properties of other herbs.

-Mu Tong - Promotes urination and unblocks blood vessels. With Dang Gui, promotes circulation of Blood and stops pain.

TREATS

Raynaud's disease. Rheumatoid arthritis. Fibromyalgia. Sciatica. Peptic ulcer. Chronic urticaria. Frostbite. Thromboangitis obliterans (Buerger's disease). Vascular headaches. Impotence. Scleroderma. Basilar artery insufficiency. Hypertensive headache. Gingivitis. Lumbago. Lower back sprains. Cholecystitis. Pain from cancers. Idiopathic thrombocytopenic purpura. Perimenstrual edema. Postoperative adhesions. Peripheral neuropathy. Benign prostatic hypertrophy. Amenorrhea. Allergic rhinitis. Athetosis. Acrocyanosis. Abdominal pain. Infertility. Chronic gastritis. Abdominal fullness and distention. Vaginal discharge. Arthralgia. Gout. Erythema multiforme. Hip pain. Migraine. Anemia. Arthritis. Hernia due to Cold. Beriberi. Nephritis. Intestinal colic. Ephidrosis during fever. Calluses and corns. Varicocele. Takayasu's arteritis. Coronary artery insufficiency. Traumatic headache. Trigeminal neuralgia. Periarthritis of the shoulders. Pelvic inflammatory disease. Meniere's disease. Prostatitis. Tenosynovitis. Early stage upper respiratory tract infections. Frozen shoulder. Hypertrophic myelitis. Endometriosis. Psoriasis. Benzene poisoning. Dysmenorrhea. Chilblain. Postpartum pain. Stomach cancer. Abdominal Cold. Diarrhea. Peripheral neuritis. Wrist and hand pain. Thrombophlebitis. Ear pain.

* ER LONG ZUO CI WAN - 耳聋左慈片 - Formula For Deafness That Is Kind To The Left (Kidney)

ACTIONS - Nourishes Kidney and Liver Yin. Benefits the Ears. Clears Deficiency Heat. Calms the Liver. Subdues Liver Yang.

SYNDROMES - Hearing difficulty due to Kidney and Liver Yin Deficiency with Yang Rising.

CLINICAL MANIFESTATIONS - Tinnitus. Continuous cicada-like tinnitus that is worse at night. Deafness. Vertigo. Dizziness. Irritability. Insomnia. Blurred vision. Red eyes. Dry mouth and throat.

NOTES - This formula is widely used for hearing loss due to old age.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Jing and Blood, fills the Marrow and nourishes Liver and Kidney Yin. With Shan Yan and Ze Xie, for Ascendant Fire due to exhaustion of Kidney Yin.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiency of the Liver and Kidneys. With Shu Di Huang, Shan Yao, Ze Xie, Fu Ling and Mu Dan Pi, for Kidney and Liver Yin Deficiency.

-Shan Yao - Tonifies Kidney Yin and astringes Jing. With Shu Di Huang and Shan Zhu Yu, for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency.

-Fu Ling - Strengthens the Spleen and harmonizes the Middle Jiao Promotes urination and leaches out Dampness. With Zi Xie, facilitates the removal of water and leaches out Dampness.

-Mu Dan Pi - Clears Heat, cools, invigorates and harmonizes the Blood and clears Deficiency and Liver Fire. With Ze Xie, Fu Ling and Shan Zhu Yu, for spermatorrhea due to Kidney Yin Deficiency with Heat.

-Ze Xie - Promotes urination, leaches out Dampness and drains Kidney Fire. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

-Ci Shi - Benefits Yin, nourishes the Kidneys, augments the Liver, improves hearing and vision and calms the Spirit.

-Shi Chang Pu - Transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen, promotes the movement of Qi, promotes Blood flow and reduces swelling.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing and stops diarrhea and spermatorrhea. With Shu Di Huang, Shan Yao and Shan Zhu Yu, for Lung and Kidney Deficiency with cough and wheezing.

TREATS

Tinnitus. Deafness. Diabetes. Hypertension. Meniere's disease. Dizziness. Vertigo. Chronic labrynthitis.

* HUANG LIAN JIE DU TANG - 黃連解毒湯 - Coptis Formula To Relieve Toxicity

ACTIONS - Clears Heat. Drains Fire. Relieves toxicity from all three Jiaos. Relieves inflammation. Stops bleeding. Purges Damp-Heat. Purges the Gallbladder.

SYNDROMES - Obstruction of the Three Jiaos by Fire Toxin which pervades both the Exterior and Interior. Gu Syndrome. Lung Heat.

CLINICAL MANIFESTATIONS - High fever. Irritability. Fidgeting. Dry mouth. Dry throat. Incoherent speech. Insomnia. Dark urine. Deep-rooted boils. Maculae. Carbuncles. Hematemesis. Hemoptysis. Palpitations. Furuncles. Tinnitus. Purpura. Red face. Rashes. Deep-rooted boils. Red eyes. Itchy skin. Fidgeting. Dry lips. Delirium. Dysentery with fever. Jaundice. Epistaxis. Hematuria. Cloudy mind. Diarrhea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only for Excess patients with strong constitutions. Do not use long term (it can injure Yin). Contraindicated for those with Stomach Yin Deficiency with a red tongue and no coat.

NOTES - This formula has been shown to have a marked effect in preventing iatrogenic mucositis such as stomatitis and gastrointestinal mucosal injury when treating leukemia patients with cytotoxic drugs. This formula may be effective in treating aspirin-and ethanol-induced gastric lesions.

HERBS AND ACTIONS

-Huang Lian - Clears Heat, drains Dampness, drains Fire and relieves toxicity. With Huang Qin, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease and for explosive diarrhea and dysentery with burning pain in the anus or fitted, filthy stools and abdominal pain. With Huang Qin and Zhi Zi, for high fever, irritability, dry mouth and throat, and dark urine due to Fire toxin in the three burners.

-Huang Qin - Clears Heat, resolves Fire toxins, invigorates the Blood, reduces swellings, promotes urination and reduces edema. With Zhi Zi, powerfully clears and drains lurking Heat from the Lungs with fever, fullness in the chest, cough with yellow sputum and epistaxis or hematemesis to treat Damp-Heat and jaundice, sores due to Heat toxin and irregular vaginal bleeding due to Liver Fire.

-Huang Bai - Drains Damp-Heat, especially from the Lower Jiao, drains Deficiency Fire, drains Fire and relieves toxicity. With Zhi Zi, for Lower Jiao Damp-Heat leading to hot, painful urinary dysfunction.

-Zhi Zi - Clears Heat, reduces Fire, drains Damp-Heat, cools Blood and relieves toxicity.

TREATS

Septicemia. Toxic bacillary dysentery. Pneumonia. Urinary tract infection. Encephalitis. Purulent skin lesions. Emotional instability. Fevers. Hemoptysis. Epistaxis. Hematuria. Blood diseases. Palpitations. Insomnia. Neurasthenia. Hysteria. Urticaria. Acute icteric jaundice. Acute cholecystitis. Periodontitis. Hypertension. Cerebrovascular accident. Otitis media. Nephritis. Prophylactic treatment against post-surgical infection. Herpes zoster. Post-surgical cataract. Candidiasis. Chronic fatigue syndrome. Acute eczema. Chalazion. Hordeolum. Chronic dacrystitis. Jaundice. Gu syndrome. Behcet's disease. Dermatitis. Depression. Glossitis. Schizophrenia. Anxiety. Tinnitus. Acute glomerulonephritis. Chronic pancreatitis. Purpura. Fatigue. Acute pyelonephritis. Herpes simplex. Bad breath. Thrush. Gonorrhea. Red eyes. Pruritis. Pyemia. Carbuncles. Deep-rooted boils. Cerebral bleeding. Hypertension. Influenza. Epidemic cerebrospinal meningitis. Pyogenic skin infection. Acute infectious hepatitis. Acute gastroenteritis. Acute enteritis. Menopausal syndrome. Neurosis. Stomatitis. Toothache. Nervous gastritis. Cellulitis. Acute pelvic inflammatory disease. Gingivitis. Vaginitis. Erysipelas. Sequelae of stroke. Post-ischemic brain injury. Acne. Impetigo herpetiformis. Eczema of the anus. Giardiasis. Leaky gut syndrome. Prostatitis. Vestibulitis. Cataracts. Blepharitis. Eyelid edema. Irritable bowel syndrome. AIDS/HIV. Furuncles and boils. Constipation. Anxiety neurosis. Panic disorder. Post-febrile disease. Bi-polar disorder. Diarrhea. Prostatitis. Acute pancreatitis. Peptic ulcer. Allergic purpura. Hematemesis. Drug-induced dermatitis. Liver cancer. Indigestion. Ear pain.

* HUO XUE HUA YU ER HAO ZHEN JI - 活血化瘀二号赈济 - Invigorate The Blood And Break Up Stasis #2

ACTIONS - Nourishes and Invigorates the Blood.

SYNDROMES - Blood Stagnation

CLINICAL MANIFESTATIONS - Fever. Fatigue. Weight loss. Muscle and joint pain. Loss of appetite. Nerve problems, such as numbness or weakness.

HERBS AND ACTIONS

-Dan Shen - Invigorates, nourishes and cools the Blood, dispels Blood Stasis, clears Heat and calms the Spirit.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi.

-Bai Shao - Nourishes the Blood.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

TREATS - Vasculitis.

* JIA WEI SHEN QI WAN - 加味腎氣丸 - Augmented Kidney Qi Formula

ACTIONS - Warms and Tonifies the Kidney Yang. Assists Qi in transforming water. Promotes urination. Reduces edema.

SYNDROMES - Kidney Yang Deficiency with overflow of water.

CLINICAL MANIFESTATIONS - Aversion to Cold. Cold extremities. Scanty urination. Edema of the legs. Abdominal distention. Lower back soreness and pain. Severe pitting edema. Fatigue. Sensory numbness. Urinary difficulties.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency Fire. Contraindicated for those with Excess Fire with damaged Body Fluids. Contraindicated for those with Exterior symptoms.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Yin and Blood and tonifies the Kidneys. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu and Shao Yao, for dizziness, weak and sore back, impotence, spermatorrhea, night sweats, due to Kidney and Liver Yin Deficiency. With Shan Zhu Yu, Mu Dan Pi, Fu Ling and Ze Xie, for Liver and Kidney Yin Deficiency.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops Excess perspiration. With Shan Yao, tonifies the Liver and benefits the Spleen.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Zi - Tonifies the Ming Men, dispels Cold, eliminates Dampness and tonifies Kidney Yang. With Rou Gui, leads Fire back to its source for Kidney Yin Deficiency with Fire. Blazing Up-ward combined with Yin tonics. With Rou Gui and Shu Di Huang, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and sore back and legs, impotence, and urinary frequency. With Shu Di Huang and Rou Gui, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and

sore back and legs, impotence, and urinary frequency. With Fu Ling, for lower body edema and dysuria.

-Gui Zhi - Warms and tonifies Kidney Yang and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Mu Dan Pi, helps move Blood to facilitate the flow to the Kidneys. With Zhi Fu Zi, for chills, backache and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination, strengthens the Spleen and drains Dampness, enabling Gui Zhi to warm the Bladder.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Gui Zhi, warms and transforms the Fluids, unblocks Yang and promotes urination.

-Mu Dan Pi - Clears Heat, Deficiency Fire, cools and harmonizes the Blood, invigorates the Blood and dispels Blood Stasis. With Ze Xie, Mu Dan Pi and Shan Zhu Yu, for spermatorrhea due to Kidney Yin Deficiency with Heat.

-Chuan Niu Xi - Tonifies the Kidneys and Liver, strengthens the tendons and bones, invigorates the Blood, dispels Blood Stasis, expels Wind, drains Dampness, promotes urination and treats dysuria.

-Che Qian Zi - Promotes urination, clears Damp-Heat, clears the Lungs, expels Phlegm, stops cough, clears Liver Heat and clears the eyes. With Ze Xie, for Lin Syndrome, edema and distention. With Jiu Chuan Niu Xi, for Kidney deficiency edema.

TREATS

Diabetes mellitus. Diabetic neuropathy. Chronic nephritis. Dysuria. Nephrotic syndrome. Hashimoto's thyroiditis. Edema. Oliguria. Infertility. Prostatic hypertrophy. Osteoporosis. Goiter. Fatigue.

* QING XIN LIAN ZI YIN - 清心蓮子飲 - Lotus Semen Combination

ACTIONS - Clears Heart Fire. Disperses Damp-Heat. Benefits Qi and Yin. Promotes urination. Treats Milky Lin (chyluria).

SYNDROMES - Heart Fire with Kidney Yin Deficiency and Damp-Heat Attacking Downward. Heart Fire with Qi and Yin Deficiency and Damp-Heat in the Lower Jiao.

CLINICAL MANIFESTATIONS - Restlessness. Irritability. Thirst. Nocturnal emission. Insomnia. Dream disturbed sleep. Lack of spirit. Fatigue. Low back pain. Tinnitus.

Dysuria. Depression. Turbid urine. Abnormal uterine bleeding. Polyuria. Enuresis. Seminal emission. Leukorrhea. Blood tinged leukorrhea. Anorexia. Dry mouth. Dry Tongue. Five Sole Heat. Fever. Physical and mental overexertion.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Lin Syndrome or leukorrhea due to Damp-Heat in the Liver and Gallbladder.

HERBS AND ACTIONS

-Mai Dong - Nourishes Stomach Yin, generates fluids, eliminates irritability and promotes urination.

-Che Qian Zi - Promotes urination and clears Heat.

-Di Gu Pi - Cools the Blood, drains Yin Deficiency Fire, drains Floating Fire in the Kidney channel and clears and Drains Heat in the Lung. With Huang Qin, for Blood Deficiency, Steaming Bone Disorder, or other recurrent afternoon fevers.

-Ren Shen - Tonifies Yuan Qi, Spleen and Stomach Qi, Lung Qi and Heart Qi. calms the Spirit, generates Body Fluids and stops thirst.
With Huang Qi, for Lung Qi Deficiency.

-Lian Zi - Tonifies the Spleen and Kidneys, astringes Jing, nourishes the Heart and calms the Spirit.

-Huang Qin - Clears Lung Heat, dries Dampness, drains Fire and detoxifies.

-Huang Qi - Strengthens the Spleen, tonifies Qi, generates Body Fluids, tonifies the Lungs (aids circulation of moisture downward from the face. promotes urination, reduces edema and expels toxins. With Ren Shen, for Qi Deficiency with general debility, anorexia and spontaneous sweat.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and Harmonizes the Middle Jiao. With Che Qian Zi, for Lin Syndrome, especially Milky Lin.

-Gan Cao - Tonifies the Spleen Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the properties of other herbs.

TREATS

Chronic cystitis. Chronic nephritis. Diabetes. Leukorrhea. Pyelonephritis. Pyelitis. Urine looks like rice water (milky). Nocturnal emission. Spermatorrhea. Urinary tract infection. Tuberculosis of the Kidney. Prostatitis. Chyluria. Benign prostatic hypertrophy. Nephrolithiasis. Hyperglycemia. Tinnitus. Anorexia. Nephrotic syndrome. Strangury. Spleen, Lung and Kidney disorders due to excessive alcohol consumption. Enuresis.

Diabetic neuropathy. Renal calculi. Chronic gonorrhea. Impotence. Urinary retention. Stomatitis. Hyperthyroidism. Acute glomerulonephritis. Urinary tract inflammation. Urolithiasis. Yeast infection. Depression. Low back pain. Fatigue. Insomnia. Spermatorrhea. Vaginitis

* SHAO YAO GAN CAO TANG - 芍藥甘草湯 - Peony And Licorice Combination

ACTIONS - Softens the Liver. Nourishes the Blood. Nourishes Yin. Moderates painful spasms. Relieves pain. Harmonizes the Middle Jiao. Replenishes Body Fluids.

SYNDROMES - Pain in the calves with Blood Deficiency or injury to fluids. Cramps in the hands and abdominal pain that improves with pressure. Insufficiency of Yin and Yang. Disharmony between the Liver and Spleen.

CLINICAL MANIFESTATIONS - Abdominal pain. Irritability. Slight chills. Spasms of the calf muscles. Cramps in the hands. Weak legs. Hypertonicity of the extremities characterized by difficult flexion and extension. Wheezing. Coughing. Hiccup. Constipation. Vomiting. Diarrhea. Sciatic pain. Severe and painful muscle spasms in the Stomach, bronchi, Gallbladder and uterus. Intestines. Shoulder pain. Pain in the head, body or limbs due to arterial spasms characterized by a severe pulling pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with hypertension. This formula may be effective in treating schizophrenia patients with neuroleptic-induced hyperprolactinemia. This formula has been shown to decrease paclitaxel-induced myalgia/arthralgia. This formula has been shown to be effective in treating menopausal symptoms induced by gonadotropin-releasing hormone agonists without a negative effect on serum estradiol levels.

HERBS AND ACTIONS

-Bai Shao - Nourishes the Blood, preserves Yin, softens the Liver and alleviates pain. With Zhi Gan Cao for abdominal pain due to disharmony between the Liver and Stomach and muscle spasms, especially in the calf, due to Blood Deficiency.

-Gan Cao - Tonifies and augments the Qi of the Middle Jiao, especially that of the Spleen.

TREATS

Intercostal neuralgia. Sciatica. Trigeminal neuralgia. Post-herpetic neuralgia. Chronic pelvic inflammatory disease. Primary dysmenorrhea. Muscular rheumatism. Chronic pancreatitis. Dysuria. Bronchial asthma. Spasmodic cough. Hemorrhoid pain. Bladder pain. Fibromyalgia. Cramping calf muscles. Priapism. Post stroke contractures. Acute lumbar strain. Biliary colic. Gastric spasm. Chronic gastritis. Peptic ulcers. Pertussis. End-stage hepatic carcinoma. Rheumatoid arthritis. Cervical spine syndrome. Disc

disease. Recalcitrant hiccups. Bruxism. Parkinson's disease. Atrial fibrillation. Enuresis. Allergic purpura. Bronchiectasis. Infertility. Impotence from increased prolactin levels. Chronic hepatitis. Acute mastitis. Habitual constipation. Coronary artery disease. Intestinal cramps. Systremma. Perimenopause with uterine leiomyoma. Hyperosteogeny. Abdominal pain. Purpura. Cervical spondylosis. Ulcerative colitis. Calf spasm. Toothache. Beriberi. Palsy in legs. Noctiphobia. Lumbago. Frozen shoulder. Hernia pain. Nephrolithiasis pain. Cholelithiasis pain. Muscle spasms in waist and back. Intestinal cramps. Pain and discomfort from spasms of the skeletal muscles, ligaments and related tissues. Vaginismus. Laryngeal spasm. Periarthritis of the shoulder. Spinal osteophytes. Renal colic. Intestinal adhesions. Atrophic gastritis. Colitis. Chronic colitis. Threatened miscarriage. Heel pain. Necrosis of the femoral head. Neuralgia. Diabetic neuropathy. Restless leg syndrome. Facial tics. Essential tremors. Night terrors. Thrombocytopenic purpura. Upper gastrointestinal bleeding. Recurrent epistaxis. Hypertestosteronemia. Myasthenia gravis. Diabetes. Bacillary dysentery. Anal fissures. Convulsions. Frozen shoulder. Drug induced menopause. Urolithiasis pain. Weakness. Indigestion

* TAO HONG SI WU TANG - 桃红四物汤 - Four Substances Formula With Safflower And Peach Pit

ACTIONS - Tonifies and invigorates the Blood. Regulates Blood circulation. Breaks up Blood Stagnation. Regulates menstruation. Alleviates pain.

SYNDROMES - Concurrent Blood Deficiency and Blood Stagnation. Blood Stagnation due to Blood Deficiency. Atrophy disorder (Wei Syndrome) due to Blood Stagnation.

CLINICAL MANIFESTATIONS - Copious bleeding of dark purple blood. The blood is sticky during menstruation. May or may not have clots. Menstrual cycle is shortened (early menstruation). Palpitations. Dizziness. Blurred vision. Pale, lusterless complexion. Pale nails. Abdominal pain. Irregular menstruation with little flow. Fixed lower abdominal pain. Dry skin. Vertigo. Tinnitus. Pale lips. May be amenorrhea. Insomnia. Menstruation may also be accompanied by distention and pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution for those with digestive weakness. Use with caution for those with anemia with coldness. Discontinue use once the desired effects have been achieved to avoid profuse bleeding. Contraindicated during pregnancy. Use with caution for those with menstrual disorders with underlying Qi and Blood Deficiency.

HERBS AND ACTIONS

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold, alleviates pain and treats headaches. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses, and amenorrhea and Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis.

-Dang Gui - Tonifies Blood, regulates menses, activates and harmonizes Blood, disperses Cold, reduces swelling, expels pus, generates flesh and alleviates pain. With Bai Shao, regulates and harmonizes Qi and Blood. With Bai Shao, Shu Di Huang and Chuan Xiong, for menstrual irregularity, amenorrhea, and dysmenorrhea due to Blood Deficiency or Stasis. With Tao Ren and Hong Hua, for amenorrhea, pain, swelling and other symptoms associated with Blood Stasis.

-Bai Shao - Nourishes Blood, regulates menstruation, astringes Yin, calms Liver Yang and alleviates pain. With Dang Gui, nourishes Yin and Blood.

-Shu Di Huang - Tonifies Blood and nourishes Yin, Jing and Blood. With Dang Gui and Bai Shao, for dizziness, palpitations, insomnia, and menstrual dysfunction due to Blood Deficiency.

-Tao Ren - Dispels Blood Stasis and activates Blood circulation. With Hong Hua, for dysmenorrhea and amenorrhea with abdominal pain, clotting and scanty flow and rheumatoid arthritis due to Blood Stasis. With Hong Hua, Chi Shao and Dang Gui, for trauma with pain.

-Hong Hua - Activates the Blood, regulates menstruation, dispels Blood Stasis and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

TREATS

Irregular menstruation with distention and pain. Anemia. Endometriosis. Threatened miscarriage. Postpartum weakness. Dysmenorrhea. Infertility. Cerebral infarction. Hypertension. Diabetic neuropathy. Migraine. Post-herpetic neuralgia. Optic nerve atrophy. Cataract. Urticaria. Eczema. Acne. Rosacea. Obesity. Herpes zoster. Chronic rhinitis. Insomnia. Coronary artery disease. Dizziness. Diabetes. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Trigeminal neuralgia. Emphysema. COPD. Senile dementia. Abdominal pain. Weakness. Herniated lumbar disc. Low back pain. Gout. Dry skin. Premenstrual breast distention. Cirrhosis of the Liver. Menorrhagia. Early menstruation. Chloasma. Measles. Psoriasis. Erythema. Nodusium. Dermatosclerosis. Keloid. Chronic pelvic inflammatory disease. Sequelae of stroke. Hyperlipidemia. Headache. Bone fractures. Allergic rhinitis. Optic neuritis. Glaucoma. Itching. Skin Bi. Amenorrhea. Scleroderma. Prolonged menstruation. Premature ovarian failure, prevention. Premature ovarian failure. Flat warts. Vertigo. Atrophy (Wei) Syndrome. Acute infectious multiple neuritis. Hysterical paralysis. Periodic paralysis. Facial paralysis. Stomach cancer. Asthmatic bronchitis. Bronchial asthma. AIDS/HIV. Dermatitis. Tinnitus. Hemorrhoids. Palpitations. Scanty menstruation. Late menstruation. Postpartum anemia. Wrist and hand pain. Fibrocystic breast disease. Anicteric viral hepatitis. Coronary Heart disease. Sore throat.

1.3.3.3 RT-TCM-03

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_03

Bai He Gu Jin Tang, Er Chen Tang, Fu Zi Tang, Huang Qi Gui Zhi Wu Wu Tang, Liu Jun Zi Tang, Sheng Mai San, Si Jun Zi Tang, Si Wu Tang, Xue Bi Jing

Recordings Updated in May 2025

* BAI HE GU JIN TANG - 百合固金湯 - Lily Bulb Formula To Preserve The Metal

ACTIONS - Nourishes Yin. Moistens the Lungs. Transforms Phlegm. Stops Cough. Clears Heat. Nourishes the Blood,

SYNDROMES - Lung Yin Deficiency. Lung and Kidney Yin Deficiency with Fire Flaring.

CLINICAL MANIFESTATIONS - Cough with blood streaked sputum. Wheezing. Dry, sore throat. Five sole Heat. Afternoon fever. Low grade fever. Malar flush. Irritability. Insomnia. Shortness of breath. Nocturnal emission. Steaming bones. Vivid dreaming. Fatigue. Tinnitus. Dizziness. Dyspnea. Dysphoria. Hoarseness. Night sweats. Maybe hemoptysis. Restlessness. Decreased urination.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with cough due to Excess conditions. Use caution or those with Spleen Deficiency. Use caution or those with Food Stagnation.

HERBS AND ACTIONS

-Bai He - Moistens and nourishes the Lungs and clears Heat. With Shu Di Huang, for palpitations, irritability, insomnia, and dark, scanty urine due to lingering Heat. With Di Huang and Shu Di Huang, nourishes and moistens the Lungs and Kidneys. With Di Huang, Shu Di Huang and Xuan Shen, for cough with Blood-streaked sputum, hot palms and soles and night sweats from Lung and Kidney Yin Deficiency. With Mai Dong, Xuan Shen and Chuan Bei Mu, for chronic dry cough and sore throat due to Lung Yin Deficiency.

-Di Huang - Tonifies the Kidneys, nourishes Yin, generates fluids, increases saliva, cools the Blood and stops bleeding. With Xuan Shen, for dry throat, irritability, a red tongue and a thready, rapid pulse due to Yin Deficiency with Fire Flaring. With Xuan Shen and Mai Dong, for dry throat, irritability, a red tongue, and a fast thready pulse due

to Devastated Yin with Blazing Fire, excessive thirst, irritability, and a scarlet tongue due to Ying Stage Heat, swelling of the throat and lymph nodes and constipation due to Excess Heat with Yin Deficiency. With Bai Shao, for Blood Deficiency Heat.

-Shu Di Huang - Tonifies Liver and Kidney Yin. With Di Huang, treats Yin Deficiency with Fire Flaring.

-Mai Dong - Moistens the Lungs, stops cough and nourishes Yin especially of the Upper Jiao. With Xuan Shen, nourishes Yin and clears Heat. With Xuan Shen, Jie Geng and Gan Cao, for itchy, dry throat, thirst and a nonproductive cough due to Lung Yin Deficiency. With Di Huang, for hematemesis or epistaxis due to Yin Deficiency with Excess Heat.

-Xuan Shen - Clears Heat, cools the Blood and nourishes Yin. With Bai He, for Yin Deficiency with Lung Dryness and a dry cough. With Jie Geng and Gan Cao, for a sore throat with Dryness and pain.

-Chuan Bei Mu - Moistens the Lungs, transforms Phlegm, stops cough and clears Heat. With Xuan Shen, clears Heat.

-Jie Geng - Moves Lung Qi, expels Phlegm and stops cough especially with Chuan Bei Mu. With Gan Cao, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat.

-Dang Gui - Nourishes and invigorates the Blood. With Bai Shao, nourishes Yin Blood and protects the Lungs against Liver attack. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Bai Shao - Nourishes Blood and astringes Yin. With Dang Gui, Shu Di Huang and Mai Dong, for tinnitus, dizziness, blurred vision, numbness of the extremities, and muscle spasms due to Liver Yin Deficiency.

-Gan Cao - Moistens the Lungs, clears Heat, stops cough and moderates and harmonizes the harsh properties of other herbs. With Jie Geng, benefits the throat.

TREATS

Bronchial spasm. Chronic bronchitis. Upper respiratory tract infection. Emphysema. Goiter. Gastroptosis. Eclampsia. Hangover. Tracheitis. Gastrointestinal neurosis. Late menstruation. Obesity. Amenorrhea. Glaucoma. Acne. Common cold. Dizziness. Hiccups. Vaginal discharge. Chronic obstructive pulmonary disease. Numbness. Pertussis. Nausea/Vomiting. Tinnitus. Otitis externa. Cervical spondylosis. Anorexia. Fatigue. Psychosis. Morning sickness. Globus hystericus. Dyspnea. Constipation. Otorrhea. Ear pain. Facial edema. Apoplexy. Chronic gastritis. Pneumonia. Vernal conjunctivitis. Asthma. Meniere's disease. Peptic ulcer. Bronchitis. Gastritis. Seizures.

Scanty menstruation. Childhood eczema. Headache. Infertility. Influenza. Cough. Vertigo. Diabetes mellitus. Stomach cancer. Trigeminal neuralgia. Paresthesia. AIDS/HIV. Breast cancer. Otitis media. Deafness. Chronic pancreatitis. Palpitations. Hyperlipoproteinemia. Chronic gastroenteritis. Indigestion. Bronchiectasis. Acid reflux. Low back pain. Sore throat.

* ER CHEN TANG - 二陈汤 - Formula Of Two Old Drugs. Citrus And Pinellia Combination

ACTIONS - Dries Dampness. Transforms Phlegm. Regulates Qi. Harmonizes the Middle Jiao.

SYNDROMES - Phlegm-Damp Obstructs the Lungs. Spleen-Damp Disturbs the Lungs. Damp-Phlegm Retention (Shi Tan). Internal Phlegm-Damp with Qi Deficiency. Wind-Phlegm (Feng Tan).

CLINICAL MANIFESTATIONS - Cough with copious, dilute, white frothy or lumpy sputum. Chest and epigastric congestion. Palpitations. Headache. Pain and full feeling in chest. Dyspnea - worse lying down. Asthma. Throat rattle. Maybe anorexia. Lassitude. Nausea/vomiting. Dizziness/vertigo. Shortness of breath. Wheezing. Acute attack of panting with high pitched sound and rapid exhalation. Facial edema. Weak extremities.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Lung Yin Deficiency cough.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, expels Phlegm, descends Stomach Qi and reduces distention. With Chen Pi, for Spleen Qi Deficiency or Phlegm-Damp Obstruction manifesting as productive cough and a stuffy chest.

-Chen Pi - Revives the Spleen, activates Middle Jiao Qi, dries Dampness and transforms Phlegm. With Ban Xia, for viscous sputum and a stuffy chest due to Phlegm-Damp Obstruction.

-Fu Ling - Strengthens the Spleen, transforms Phlegm and drains Dampness from the Middle Jiao. With Chen Pi, Ban Xia and Sheng Jiang, for congested Fluids in the Stomach causing distention, nausea and vomiting.

-Sheng Jiang - Transforms Phlegm. With Ban Xia, for nausea.

-Gan Cao - Tonifies the Spleen, resolves Phlegm and moderates and harmonizes the properties of other herbs.

TREATS

Bronchial spasm. Chronic bronchitis. Upper respiratory tract infection. Emphysema. Goiter. Gastroptosis. Eclampsia. Hangover. Tracheitis. Gastrointestinal neurosis. Late menstruation. Obesity. Amenorrhea. Glaucoma. Acne. Common cold. Dizziness. Hiccups. Vaginal discharge. Chronic obstructive pulmonary disease. Numbness. Pertussis. Nausea/Vomiting. Tinnitus. Otitis externa. Cervical spondylosis. Anorexia. Fatigue. Psychosis. Morning sickness. Globus hystericus. Dyspnea. Constipation. Otorrhea. Ear pain. Facial edema. Apoplexy. Chronic gastritis. Pneumonia. Vernal conjunctivitis. Asthma. Meniere's disease. Peptic ulcer. Bronchitis. Gastritis. Seizures. Scanty menstruation. Childhood eczema. Headache. Infertility. Influenza. Cough. Vertigo. Diabetes mellitus. Stomach cancer. Trigeminal neuralgia. Paresthesia. AIDS/HIV. Breast cancer. Otitis media. Deafness. Chronic pancreatitis. Palpitations. Hyperlipoproteinemia. Chronic gastroenteritis. Indigestion. Bronchiectasis. Acid reflux. Low back pain. Sore throat.

* FU ZI TANG - 附子汤 - Aconite Accessory Root Formula

ACTIONS - Dispels Cold. Warms the channels. Assists Yang. Dispels Dampness. Relieves pain.

SYNDROMES - Yang Deficiency with Internal Cold-Dampness. Tai Yang Shang Han. Yang Ming Han

CLINICAL MANIFESTATIONS - Aching bones and joints. Muscle ache. Whole body pain. Aversion to Cold, especially at the back. Cold limbs. Lower abdominal pain and Cold. Abdomen feels chilled. Maybe fever. No thirst.

HERBS AND ACTIONS

-Fu Zi - Disperses Cold and Dampness, warms the channels and stops pain. With Ren Shen, for severe Deficiency of Source Qi and Collapse of Yang with cold extremities, sweating, weak breathing, dizziness and an extremely pale complexion. With Bai Zhu, for Wind-Damp Bi. With Bai Zhu and Fu Ling, for Kidney and Spleen Yang Deficiency with retention of pathogenic water with abdominal pain, which is worse with Cold, urinary difficulty, and deep aching and heaviness in the extremities. With Fu Ling, for lower body edema and dysuria.

-Bai Zhu - Tonifies the Spleen and augments Qi Dries Dampness and promotes water metabolism.

-Ren Shen - Powerfully tonifies Qi.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Ren Shen and Bai Zhu, for a weak and deficient Spleen with fatigue, anorexia and loose

stools.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain.

TREATS

Painful obstruction. Arthralgia. Arthritis. Trigeminal neuralgia. Bell's palsy. Cervical spine disease. Ankylosing spondylitis. Essential tremor. Cirrhosis of the Liver. Chronic bronchitis. Uterine prolapse. Erectile dysfunction. Common cold. Rheumatism. Peritonitis. Stomatitis. Abdominal pain. Monoplegia. Dermatitis. Whole body pain. Abdominal distention and pain during pregnancy. Migraine. Cluster headache. Piriformis syndrome. Periarthritis of the shoulder. Lumbar disc disease. Chronic nephritis. Nephrotic syndrome. Cardiac disease. Congestive Heart failure. Stroke. Influenza. Neuralgia. Edema. Ascites. Facial paralysis. Eczema. Urticaria. Maybe fever. No thirst.

* HUANG QI GUI ZHI WU WU TANG - 黃耆桂枝五物湯 - Astragalus And Cinnamon Twig Five-substance Formula

ACTIONS - Tonifies Qi and Blood. Warms and harmonizes the channels and collaterals. Harmonizes the Ying and Wei. Unblocks painful obstruction. Warms the Middle Jiao. Dispels Cold. Alleviates pain. Harmonizes Yin and Yang.

SYNDROMES - Bi syndrome of the Blood. Blood Stagnation due to a Mild Attack of Wind-Cold with Qi Deficiency. Consumptive diseases due to Yin and Yang Deficiency.

CLINICAL MANIFESTATIONS - Relatively superficial numbness without pain. Paresthesia and numbness of the skin and flesh. Paresthesia of the shoulders. Neck and shoulder stiffness and pain. Abdominal pain alleviated by warmth and pressure. Pale complexion. Hemiplegia. Stiff tongue. Flaccidity if the extremities. Migratory pain. Pain, weakness, tightness or spasms of the extremities. Spontaneous sweating. Shortness of breath. Aphasia. Excess salivation. Aversion to Wind.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, Tonifies Wei Qi, stabilizes the exterior, raises the Yang Qi of the Spleen and Stomach and relieves numbness and pain. With Gui Zhi, for Qi and Blood Deficiencies and Ying and Wei Deficiencies with numbness and painful obstruction of the musculature.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels, assists the Heart Yang and warms and facilitates the flow of Yang Qi in the chest. With Bai Shao, for External Wind-Cold with disharmony between the Ying and

Wei (Tai Yang Zhong Feng), with spontaneous sweating, fever and chills warms and tonifies the Middle Jiao.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind and alleviates pain. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration. With Huang Qi, Gui Zhi, Sheng Jiang and Da Zao, for Bi syndrome.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, adjusts the Ying and Wei for treatment of Tai Yang Zhong Feng.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Middle, normalizes the flow of Qi at the center and reduces the toxicity of other herbs. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis. With Da Zao, for External Wind-Cold.

TREATS

Raynaud's disease. Polyneuritis. Diabetic neuropathy. Scleroderma. Dermatomyositis. Bell's palsy. Common perineal neuropathy. Cervical spondylosis. Sequelae of stroke. Facial tics. Urinary retention. Nephritis. Pneumonia. Synovitis of the knees. Hemiplegia. Facial paralysis. Frostbite. Poliomyelitis. Muscular dystrophy. Arthritis (migratory) with numbness. Neurosis. Paresthesia. Abdominal pain. Lateral epicondylitis. Neck pain and stiffness. Takayasu's arteritis. Thromboangitis obliterans. Ulcers of the lower extremities. Bed sores. Urticaria. Idiopathic thrombocytopenic purpura. Sciatica. Rheumatoid arthritis. Restless leg syndrome. Postpartum problems. Chronic prostatitis. Obesity. Coronary artery disease. Peripheral neuritis. Muscular paralysis. Beriberi. Cerebral accidents. Guillain-Barre disease. Arthralgia. Monoplegia. Numbness. Periarthritis of the shoulder. Aphasia. Peripheral neuropathy. Painful obstruction.

* LIU JUN ZI TANG - 六君子湯 - Six Gentlemen Formula

ACTIONS - Tonifies Qi. Strengthens the Spleen and Stomach. Transforms Phlegm. Dries Dampness. Stops vomiting. Circulates Qi. Harmonizes the Middle Jiao.

SYNDROMES - Stomach Qi Deficiency. Spleen and Stomach Qi Deficiency with Phlegm-Damp Retention. Atrophy disorder (Wei Syndrome) due to Spleen and Stomach Qi Deficiency.

CLINICAL MANIFESTATIONS - Nausea. Vomiting. Distention of chest and epigastrium. Coughing up copious, thin, white sputum. Dyspnea. Sallow complexion. Anorexia. Rolled lips. Pale lips. Stiff tongue. Tired limbs. Heavy limbs. Abdominal and epigastric distention after meals. Maybe bleeding. Stifling sensation in the chest and epigastrium. Acid regurgitation. Shortness of breath. Loose stools or diarrhea. Lethargy. Thin

muscles. Fatigue. Does not like to speak. Weak, soft voice. Maybe enuresis. Maybe borborygmus. Maybe cold extremities. Maybe abundant clear urine. Muscle weakness in arms and legs. Weak abdomen.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution for those with a high fever, Yin Deficiency Heat, Qi Stagnation, Body Fluid Deficiency, irritability, thirst or constipation.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi and strengthens Spleen and Stomach. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu and Fu Ling, for Spleen and Stomach Qi Deficiency.

-Bai Zhu - Strengthens the Spleen and dries Dampness.

-Fu Ling - Dries Dampness, strengthens the Spleen and moderates the drying nature of Gan Cao. With Ban Xia, stops nausea and vomiting. With Ban Xia and Chen Pi, for nausea, vomiting and anorexia due to congested Fluids.

-Gan Cao - Harmonizes, warms and strengthens the Middle Jiao and moderates the draining properties of Fu Ling.

-Chen Pi - Circulates Qi, dries Dampness, tonifies the Spleen and adjusts the Middle. With Bai Zhu, for manifestations of Damp-Obstruction due to Spleen Deficiency.

-Ban Xia - Dries Dampness, resolves Phlegm, harmonizes the Stomach and stops vomiting. With Chen Pi, for Stomach Qi disharmony with epigastric and abdominal distention or pain.

-Gan Jiang - Warms the Middle.

-Da Zao - Harmonizes Ying and Wei.

TREATS

Indigestion. Chronic gastritis. Gastric or duodenal ulcer. Chronic gastroenteritis. Gastroptosis. Malnutrition - weight loss. Anemia. Obesity. Amenorrhea. Cough. Abdominal pain. Nausea. Vomiting. Chronic bronchitis. Pain in Liver cancer. Depression. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Hay fever. Chronic Kidney failure. Asthma. COPD. AIDS/HIV. Abdominal fullness and distention. Neurasthenia. Otitis media. Meniere's disease. Chronic hepatitis. Hypotension. Weakness. Leukorrhea. Lung cancer. Urinary tract infection. Constipation. Otorrhea. Ear pain. Deafness. Atrophy (Wei) Syndrome. Toxemia during pregnancy. Gastric cancer. Chronic peritonitis. Rickets. Nervous

exhaustion. Gastralgia. Acid reflux. Acne. Irritable bowel syndrome. Diarrhea. Morning sickness. Stomatitis. Supportive treatment during chemotherapy. Stress. Enteritis. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Polyuria. Emphysema. Hay fever. Menopause. Nausea/Vomiting. Diarrhea. Tinnitus. Otitis externa. Vertigo. Anorexia. Fatigue. Yawning. Spontaneous perspiration. Osteoarthritis. Dyspnea. Edema during pregnancy. Cough during pregnancy. Chemotherapy for breast cancer. Coughing and asthma associated with AIDS/HIV

* SHENG MAI SAN - 生脈散 - Generate The Pulse Formula

ACTIONS - Augments Qi. Generates Fluids. Clears Heat. Preserves Yin. Stops Excess perspiration.

SYNDROMES - Lung and Kidney Qi Deficiency. Heart and Lung Qi Deficiency. Lung Qi and Yin Deficiency. Atrophy disorder (Wei Syndrome) due to Lung Heat with Fluid Deficiency.

CLINICAL MANIFESTATIONS - Chronic cough with sparse sputum. Sputum difficult to expectorate. Shortness of breath. Spontaneous perspiration. Dry mouth and tongue. Dry skin. Palpitations with a stifling sensation in chest. Fatigue. Irritability. Thirst. Dry throat. Insomnia. Listless speech.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use extreme caution with high fever. Use extreme caution for unresolved external cough. Do not use in initial stage flu in summer with mild conditions. Do not use if Fluids are not yet injured.

HERBS AND ACTIONS

-Ren Shen - Tonifies Heart, Spleen and Lung Qi and generates Fluids. With Mai Dong, strongly generates Fluids. With Wu Wei Zi, rescues Qi and Yin. With Mai Dong and Wu Wei Zi, for Qi and Yin Deficiency.

-Mai Dong - Nourishes Yin, moistens the Lungs, generates Fluids, stops cough, clears Heat from the Heart and eliminates irritability.

-Wu Wei Zi - Astringes Lung Qi, generates Fluids, tonifies Qi and nourishes Kidney Yin.

TREATS

Acute collapse. Chronic bronchitis. Pulmonary tuberculosis. Supraventricular arrhythmias. Rheumatic Heart disease. Post-bypass debility. Hemorrhagic shock (IV drip). Cardiogenic shock (IV drip). Neurasthenia. Palpitations. Hyperthyroidism. Insomnia. Arrhythmia. Myocarditis. Cerebral infarction. Leukopenia. Diabetes mellitus. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute

myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. Myasthenia gravis. The sequelae of poliomyelitis. Hay fever. COPD. AIDS/HIV. Low-grade fever. Neurasthenia. Neurosis. Stroke. Cholecystitis. Edema. Vaginal discharge. Dyspnea. Dry skin. Urinary incontinence. Sick sinus syndrome. Spontaneous perspiration and night sweats associated with AIDS/HIV. Atrophy (Wei) Syndrome. Coronary Heart disease. Angina pectoris. Thermoplegia. Cor pulmonare. Cardiac failure. Myocardial infarction. Heat stroke. Asthma. Coma. Cardiac arrhythmia. Morning sickness. Congestive Heart failure. Viral myocarditis. Hypotension. Alzheimer's disease. Chronic cough. Emphysema. Common cold. Infertility. Uterine fibroids. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Asthma. Systemic lupus erythematosus. Anxiety neurosis. Menopause syndrome. Panic attacks. Cholelithiasis. Fatigue. Epistaxis. Spontaneous perspiration. Sjogren's Syndrome. Metrorrhagia. Rheumatic fever. Prematurely gray hair.

* SI JUN ZI TANG - 四君子汤 - Four Gentlemen Formula. Four Major Herb Combination

ACTIONS - Tonifies Qi. Strengthens the Spleen and Stomach.

SYNDROMES - Spleen Qi Deficiency. Heart Qi Deficiency. Lung and Spleen Qi Deficiency. Heart and Lung Qi Deficiency. Gu Syndrome.

CLINICAL MANIFESTATIONS - Pale face. Sallow complexion. Anorexia. Rolled lips. Pale lips. Stiff tongue. Tired limbs. Heavy limbs. Abdominal and epigastric distention after meals. Maybe bleeding. Maybe nausea and vomiting. Maybe acid regurgitation. Shortness of breath. Loose stools or diarrhea. Fatigue. Lethargy. Thin muscles. Low, soft voice. Does not like to speak. Muscle weakness in arms and legs. Maybe enuresis. Weak abdomen. Maybe borborygmus. Epigastric or abdominal pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Excess Syndromes with high fever, irritability, thirst and constipation. Contraindicated for those with Deficiency Heat, high fever or a combination of irritability, thirst and constipation unless modified.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi and strengthens the Spleen and Stomach. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Gan Cao and Fu Ling, for Spleen and Stomach Qi Deficiency.

-Bai Zhu - Strengthens the Spleen, augments Qi and dries Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Fu Ling - Dries Dampness, strengthens the Spleen and moderates the drying nature of Gan Cao. With Ren Shen and Bai Zhu, for weak and deficient Spleen with fatigue,

anorexia and loose stools.

-Gan Cao - Harmonizes, warms and strengthens the Middle Jiao and moderates the draining properties of Fu Ling. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency and palpitations due to Heart Qi Deficiency. With Ren Shen, Bai Zhu and Fu Ling, strengthens the Spleen and augments Qi.

TREATS

Neurasthenia. Chronic gastritis. Peptic ulcer. Irritable bowel syndrome. Diabetes mellitus. Periodic paralysis. Chronic hepatitis. Recurrent nosebleeds. Adjunctive therapy in conjunction with chemotherapy or radiation therapy in cancer patients. Uterine fibroids. Chronic Fatigue Immune Deficiency Syndrome (CFIDS). Colitis. Menstrual bleeding. COPD. Cardiac arrhythmia. Acid reflux. Childhood eczema. Arteriosclerosis. Stroke. Blepharitis. Gastralgia. Chronic dysentery. Common cold. Emphysema. Thromboangitis obliterans. AIDS/HIV. Chronic tonsillitis. Diarrhea. Neurosis. Intestinal tuberculosis. Cholelithiasis. Chronic pancreatitis. Hypotension. Weakness. Yawning. Chronic nephritis. Spontaneous perspiration. Dyspnea. Puerperal fever. Chemotherapy for breast cancer. Chronic bacillary dysentery. Leukopenia. Candidiasis. Uterine fibroids. Reduces recovery time after gastric surgery. Gastroptosis. Malnutrition. Anemia. Monoplegia. Fever of unknown origin. Sequelae of infections, especially in children. Coronary artery disease. Chronic bronchitis. Premenstrual syndrome. Chronic tonsillitis. Leaky gut syndrome. Giardiasis. Palpitations. Chronic laryngitis. Hyperglycemia. Obesity. Headache. Hordeolum. Acne. Cough. Stomach cancer. Asthma. Periarthritis of the shoulder. Gu syndrome. Fibrocystic breast disease. Abdominal fullness and distention. Abdominal pain. Gastric neurosis. Peritoneal tuberculosis. Cholecystitis. Anorexia. Hypothyroidism. Fatigue. Edema. Congestive Heart failure. Menorrhagia. Indigestion. Pharyngitis. Sjogren's Syndrome. Vaginal discharge. Ulcerative colitis. Foot pain.

* SI WU TANG - 四物汤 - Four Substances Formula. Tangkuei Four Combination

ACTIONS - Nourishes the Blood. Regulates the Liver. Improves Blood circulation. Regulates menstruation.

SYNDROMES - Liver Blood Deficiency. Liver Wind Stirring Internally: Liver Blood Deficiency Generates Wind. Liver Blood Stagnation due to Blood Deficiency. Insufficiency of the Chong and Ren channels.

CLINICAL MANIFESTATIONS - Dizziness. Blurred vision. Pale, lusterless complexion. Pale nails. Pale lips. Generalized muscle tension. Tremors and tics. Irregular menstruation with little flow. Amenorrhea. Periumbilical pain. Lower abdominal pain. Vertigo. Tinnitus. Blurred vision. Insomnia. Spotting of pale Blood. Postpartum uterine bleeding. Dry hair. Maybe Five Sole Heat. Delayed menstruation. Palpitations. Dizziness. Dry skin. Maybe leukorrhea. Maybe fever. Firm, painful abdomen. Sporadic

fever and chills. Menorrhagia. Hard abdominal masses with recurrent pain. Unstable fetus with bleeding. Chills and fever.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with acute, severe blood loss. Contraindicated for those with severe weakness or labored breathing. Modify for those with constitutional Spleen Yang Deficiency. Contraindicated for those with dehydration. Use with caution for those with Spleen and Stomach Deficiency due to the Stagnating nature of Shu Di Huang. Contraindicated for those with Blood or Qi collapse. Use with caution during pregnancy. This formula has shown the ability to reduce recovery time in penicillin induced dermatitis. This formula has shown the ability to reduce scopolamine-induced spatial cognitive deficits.

HERBS AND ACTIONS

-Shu Di Huang - Strengthens the Liver and Kidneys and nourishes the Yin of the Blood. With Bai Shao, strongly nourishes Liver Blood.

-Bai Shao - Nourishes Blood, preserves Yin, calms Liver Yang and alleviates pain. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision and dysmenorrhea due to Blood Deficiency or Blood Stasis.

-Dang Gui - Nourishes and invigorates the Blood, regulates Liver and Kidneys, regulates menses and alleviates pain. With Shu Di Huang, Bai Shao and Chuan Xiong, for menstrual irregularity, amenorrhea and dysmenorrhea due to Blood Deficiency or Stasis.

-Chuan Xiong - Invigorates Blood, moves Qi, releases Stagnation and alleviates pain. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses and amenorrhea.

TREATS

Primary dysmenorrhea. Irregular menstruation. Anemia. Threatened miscarriage. Postpartum weakness. Postpartum anemia. Insufficient lactation. Urticaria. Abnormal vaginal discharge. Ectopic pregnancy. Infertility. Vascular headache. Insomnia. Lumbago. Periarthritis of the shoulder. Dermatitis. Rosacea. Panarthralgia. Cataracts. Amenorrhea. Late menstruation. Optic atrophy. Vertigo. Paresthesia. Parkinson' disease. Addison's disease. Fever. Chronic laryngitis. Tinnitus. Neurasthenia. Hypotension. Lochiorrhea. Postpartum abdominal pain. Dry skin. Unilateral pain. Dry hair. Neurogenic headache. Headache due to trauma. Uterine bleeding. Postpartum clots or bleeding. Fetal restlessness. Lochioschesis. Menorrhagia. Psoriasis. Menstrual pain. Scanty menstruation. Breech presentation. Endometriosis. Pelvic inflammatory disease. Chronic nephritis. Sciatica. Itching. Allergic rhinitis. Eczema. Abdominal masses. Calf spasm. Gastralgia. Dizziness. Vaginal discharge. Numbness. AIDS/HIV. Constipation. Chronic fatigue syndrome. Chronic tonsillitis. Neurosis. Palpitations. Fatigue. Puerperal fever. Early menstruation. Systemic lupus erythematosus. Vaginitis.

Dandruff.

* XUE BI JING (XBJ) injection - 血必净注射液

Xuebijing (XBJ), a traditional Chinese medicine compound injection, activates blood circulation to dissipate blood stasis, eliminating pathogenic heat from the blood and degrading toxins.

Xuebijing injection (XBJ) is one of the therapeutic drugs recommended in the practice guidelines published by the Chinese Health Commission for the treatment of COVID-19. XBJ consists of Chi Shao, Chuan Xiong, Dan Shen, Hong Hua, and Dang Gui.

Clinically, XBJ is mainly used for the treatment of sepsis, infection-induced systemic inflammatory response syndrome (SIRS), and multiple organ dysfunction syndrome (MODS).

The injection has been included in the treatment guidelines for a number of viral infectious diseases in China, and recommended as a treatment for sepsis and septic shock. In Severe Community Acquired Pneumonia, XBJ injection has been shown to significantly improve the primary endpoint statistics of the pneumonia severity index and secondary clinical outcomes such as mortality, mechanical ventilation time, and duration.

1.3.3.4 RT-TCM-04

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_04

Ba Zhen Tang, Ban Xia Hou Po Tang, Dang Gui Yu Zhu Tang, Ge Gen Tang, Gui Shao Di Huang Tang, Gui Zhi Shao Yao Zhi Mu Tang, Gui Zhi Tang, Qi Ju Di Huang Wan, Yi Qi Cong Ming Tang

Recordings Updated in May 2025

* BA ZHEN TANG - 八珍湯 - Eight Treasures Formula. Dang Gui and Ginseng Eight Combination. Eight Jewel Formula. Formula of Eight Treasure Ingredients. Eight Precious Ingredients Formula. Women's Precious Formula

ACTIONS - Tonifies and augments Qi and Blood.

SYNDROMES - Qi and Blood Deficiency. Liver and Spleen Deficiency.

CLINICAL MANIFESTATIONS - Pallid or sallow complexion. Palpitations with anxiety that may be continuous. Reduced appetite. Shortness of breath. Laconic speech. Easily fatigued extremities. Light-headedness and/or vertigo. Dizziness. Anorexia. Thirst. Course, dry skin. Headache. Blurred vision. Lassitude. Severe chills and fever. Under weight. Midline pain in women. Lower abdominal pain. Lower abdominal distention. Lumbago in women. Severe chills and fever. Irregular menstruation. Weight loss. Abscesses that neither suppurate nor improve. Continuous spotting from uterine bleeding. Weakness of the limbs. Itching.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Heat or Excess conditions.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi and strengthens the Spleen and Stomach. With Shu Di Huang, for severe Qi and Blood Deficiency due to loss of blood and Qi and Yin Deficiency. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency with Dampness, anorexia, diarrhea, vomiting, abdominal distention and fatigue. With Shu Di Huang, Bai Zhu, Fu Ling and Bai Shao, for Qi and Blood Deficiency.

-Bai Zhu - Tonifies the Spleen, augments Qi and dries Dampness. With Shu Di Huang and Bai Shao, for restless fetus due to Blood Deficiency, often with palpitations. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency. With Fu Ling and Sheng Jiang, for edema with Kidney Yang Deficiency. With Shu Di Huang, Dang Gui and Bai Shao, for unstable pregnancy with Blood Deficiency.

-Fu Ling - Dries Dampness and strengthens the Spleen. With Ren Shen and Bai Zhu, for weak and deficient Spleen with fatigue, anorexia and loose stools.

-Gan Cao - Augments Qi, warms and strengthens the Middle Jiao and moderates and harmonizes the harsh properties of other herbs. With Ren Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency.

-Shu Di Huang - Strengthens the Liver and Kidneys, and nourishes the Yin of the Blood. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Bai Shao, Dang Gui and Chuan Xiong, for anemia. With Ren Shen, Bai Zhu, Fu Ling, Dang Gui and Bai Shao, for anemia with fatigue and weakness.

-Bai Shao - Tonifies Blood and preserves Yin. With Shu Di Huang, strongly tonifies Liver Blood. With Shu Di Huang and Dang Gui, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Dang Gui, nourishes Yin and

Blood.

-Dang Gui - Tonifies and invigorates the Blood, moistens the Intestines and regulates the relationship between the Liver and Kidneys. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Bai Shao, Shu Di Huang and Chuan Xiong, for menstrual irregularity, amenorrhea, and dysmenorrhea due to Blood Deficiency or Blood Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Bai Shao and Fu Ling, for diarrhea during pregnancy with mild abdominal pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. With Ren Shen, Bai Zhu, Shu Di Huang and Bai Shao, for general menstrual disorders with fatigue and weakness due to Qi and Blood Deficiency.

-Chuan Xiong - Invigorates the Blood, activates Qi, releases constraint and alleviates pain. With Dang Gui, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses, and amenorrhea. With Dang Gui, Shu Di Huang and Bai Shao, for headache from Blood Deficiency.

-Sheng Jiang - Regulates the Spleen and Stomach. With Da Zao, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen, harmonizes the Ying and Wei, Nourishes the Blood, prevents injury from harsh Blood movers and assists the movement of Qi.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs. With Ren Shen, Bai Shao and Fu Ling, for weakness and lassitude due to Spleen and Stomach Deficiency. With Sheng Jiang, enhances the effects of other Qi and Blood tonifying herbs by facilitating their digestion and absorption.

TREATS

Circulatory problems. Malnutrition. Metrorrhagia. Chronic hepatitis. Non-healing ulcers. Thrombocytopenic purpura. Atrophic gastritis. Peripheral neuritis. Coronary artery disease. Weakness during convalescence. Lumbago in women. Breech presentation. Chronic abscesses. Degeneration of the circulatory and digestive organs. Scanty menstruation. Amenorrhea. Eczema. Headache. Alopecia. Dizziness. Red vaginal discharge. Esophageal cancer. Blurred vision. Lower abdominal pain. Numbness. Anxiety. Fever. Dermatitis. Deafness. Forgetfulness. Fatigue. Hypoglycemia. Meniere's disease. Night sweats. Puerperal fever. Dyspnea. Gingivitis. Abdominal pain during pregnancy. Insufficient lactation. Irritability during pregnancy. Eclampsia. Gout. Cervical cancer. Temporomandibular joint syndrome (TMJ). AIDS/HIV/ARC. Hip pain. Prematurely gray hair. Weight loss. Chronic diseases. Aplastic anemia. Habitual miscarriage. Nervous ulcers. Sheehan's disease. Orbital optic neuritis. Corneal ulcer. Recovery from chronic illness. Post-surgical recovery. Prevention of miscarriage. Neurasthenia. All kinds of chronic diseases. Metrorrhagia during pregnancy. Irregular

menstruation. Dysmenorrhea. Infertility. Breast discharge. Excessive tearing when exposed to Wind. Vertigo. Uterine myoma. Stomach cancer. Parkinson's disease. Anorexia. Paresthesia. Hyperthyroidism. Multiple sclerosis. Behcet's disease. Tinnitus. Palpitations. Hypotension. Dysphagia. Interstitial cystitis. Spontaneous perspiration. Lung cancer. Strangury. Periodontitis. Constipation. Vaginal bleeding during pregnancy. Postpartum constipation. Stiff neck. Dry skin. Heel pain. Chemotherapy for breast cancer. Cirrhosis of the Liver. Leukopenia. Foot pain. Abdominal masses associated with AIDS/HIV.

* BAN XIA HOU PO TANG - 半夏厚朴汤 - Pinellia And Magnolia Bark Formula

ACTIONS - Activates Qi. Descends Rebellious Qi. Eliminates Phlegm. Dissipates clumps. Relieves Stagnation.

SYNDROMES - Liver Qi Stagnation: Phlegm and Qi Stagnant and Blocked (Plum-Pit Qi Stagnation). Qi Stasis with Phlegm Retention.

CLINICAL MANIFESTATIONS - A feeling of obstruction in throat as if a slice of roast meat were stuck there which cannot be coughed up nor swallowed down. This sensation becomes more prominent during emotional upset and subsides when relaxed. Distention and pain in the sides or flanks. Suffocating sensation in the chest. Tendency to sigh. Melancholy. Depression. Hypochondriac pain. Coughing with profuse phlegm. Vomiting. Difficulty swallowing. A delicate constitution. A tendency towards fatigue. Palpitations. Abdominal distention. Muscular and skin flaccidity. Fear. Edema. Asthma. Insomnia. A stifling sensation in the chest and hypochondrium. Irritability. Inappropriate anger. Women: Irregular menses. Dysmenorrhea. Breast distention and pain before and during menses.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with chest pain due to Lung Yin Deficiency with red cheeks, a bitter taste in the mouth and a red tongue with a scanty coating. Contraindicated for those with Heat due to Qi Stagnation. Do not use long term.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, stops vomiting, descends rebellious Qi and harmonizes the Stomach. With Hou Pu, for Phlegm-induced cough, vomiting, and epigastric and abdominal distention, Phlegm-Dampness with Qi Stagnation with a sensation of fullness in the chest with coughing and wheezing, nausea, vomiting and a sensation of distention in the hypochondrium and Plum-pit Qi Stagnation. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools, treats Phlegm, thin mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia. With Sheng Jiang, for vomiting due to Cold, thin mucus. With Hou Pu, Zi Su Ye and Fu Ling, for Plum-pit Qi Stagnation.

- Hou Pu - Moves Qi, resolves Stagnation, descends rebellious Qi, dries Dampness, transforms Phlegm eliminates stuffiness and aids in dissipating clumps. With Zhi Ban Xia and Fu Ling, for Phlegm Obstructing the Qi, leading to coughing, vomiting or a sense of something stuck in the throat.

-Fu Ling - Promotes urination, drains Dampness, Strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm.

-Sheng Jiang - Warms the Middle, stops vomiting, warms the Lungs and stops coughing. With Zhi Ban Xia, harmonizes the Stomach and stops vomiting and coughing.

-Zi Su Ye - Promotes the movement of Spleen and Stomach Qi (Harmonizes the Middle Jiao, relieves intestinal gas), improves Lung function and expands the chest (relieves Cold induced wheezing). With Zhi Ban Xia and Hou Pu, for Spleen and Stomach Qi Stagnation with accumulation of Phlegm.

TREATS

Globus hystericus. Depression syndrome. Hysteria. Functional gastrointestinal disorders. Recurrent neurotic esophageal constriction. Chronic laryngitis. Tracheitis. Neurosis. Throat blockage. Ascites. Emotional instability. Neurogenic vomiting. Psychosis. Perimenopausal syndrome. Laryngitis. Edema of the vocal cords. Hyperthyroidism. Indigestion. Emphysema. Meniere's disease. Pharyngeal paresthesia. Sleep apnea. Hypopnea. Panic disorder. Gastroatonia. Amenorrhea. Irregular menstruation. Uterine myoma. Dysmenorrhea. Nausea/Vomiting. Otitis media. Schizophrenia. Chronic fatigue syndrome. Vertigo. Stuffiness in the chest. Stress-related breathing problems. Neurasthenia. Dysphagia. Fatigue. Menopause syndrome. Breast distention. Gastrointestinal neurosis. Nervous exhaustion. Chronic bronchitis. Hoarseness due to the common cold. Asthma. Whooping cough. Toxemia during pregnancy. Blood vessel disorders. Edema. Esophageal spasms. Gastric relaxation. Chronic gastritis. Irritable bowel syndrome. Epilepsy. Parkinson's disease. Acute tonsillitis. Chronic tonsillitis. Goiter. Cervical spine syndrome. Morning sickness. Vertebrobasilar insufficiency. Swallowing disorder in aspiration pneumonia. Stress. Enteritis. Gastroptosis. Insomnia. Cough. COPD. Bi-polar disorder. Peptic ulcer. Anxiety. Anxiety neurosis. Dizziness. Palpitations. Borborygmus. Abdominal fullness and distention. Esophageal cancer. Reflux esophagitis. Pharyngitis.

* DANG GUI YU ZHU TANG - 当帰瘀逐湯 - Dang Gui Dispel Stasis Formula

ACTIONS - Enriches Yin. Nourishes Blood. Clears Heat. Regulates menstruation.

SYNDROMES - Kidney and Liver Yin Deficiency Heat. Blood Dryness. Heat Accumulation in the Stomach and Intestines.

CLINICAL MANIFESTATIONS - Low back, knees and legs painful and weak. Foot pain. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five-Sole-Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Dry skin. Deafness. Steaming bones. Tidal fevers. Loose teeth. Dripping urine. Scanty menstruation. Delayed menstruation. Thirst. Dry constipation. Dry tongue. Numbness and weakness at the waist and knees. Heel pain. Dry mouth. Blurred vision. Hemoptysis. Asthma. Hot flashes. Nocturnal emissions. Urinary incontinence. Spontaneous and nocturnal emissions. Night sweats.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis, regulates the menses, moistens the Intestines and unblocks the bowels. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Bai Shao - Nourishes the Blood and regulates menstruation. With Gan Cao,regulates the relationship between the Liver and Spleen and nourishes the sinews. With Dang Gui, nourishes Yin and Blood.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat and cools the Blood. With Chuan Xiong and Dang Gui, for Blood-Stasis induced gynecological disorders such as immobile abdominal masses and amenorrhea with abdominal pain. With Bai Shao, for spasms and cramping pain associated with Blood Deficiency and Blood Stagnation. With Da Huang, for chronic accumulation in the abdomen, blockage of urine, constipation, Qi rushing upward to the Heart, abdominal distention and rebellious damage from food and drink.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses, and amenorrhea. With Di Huang, Dang Gui and Bai Shao, for headache due to Blood Deficiency.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Bai Shao, for Blood Deficiency Heat.

-Da Huang - Drains Heat, purges accumulations, clears Heat, transforms Dampness, promotes urination, invigorates the Blood and dispels Blood Stasis. With Dang Gui, for Blood Stasis. With Di Huang, for parched, dry stools with damaged Yin.

-Mang Xiao - Purges accumulations, guides out Stagnation, softens hardness, moistens Dryness, clears Heat and drains Fire. With Da Huang, for constipation due to Heat in the Stomach and Intestines. With Da Huang and Gan Cao, for moderate constipation due to accumulation of Excess Heat.

-Gan Cao - Moderates spasms, alleviates pain, clears Heat and moderates and harmonizes the harsh properties of other herbs.

TREATS

Amenorrhea. Night sweats. Toothache. Dry skin. Heel pain. Hot flashes. Nocturnal emissions. Constipation. Urinary incontinence. Foot pain.

* GE GEN TANG - 葛根湯 - Kudzu Formula - Pueraria Combination

ACTIONS - Releases Wind-Cold in the exterior and muscle layer. Generates Fluids. Relieves muscle-ache of the neck.

SYNDROMES - Tai Yang Shang Han with stiff neck and upper back. Transitional stage between acute and chronic rhinitis or sinusitis. Initial stage Wind-Cold Bi.

CLINICAL MANIFESTATIONS - Chills and fever. Anhidrosis. Neck pain. Stiff and rigid neck, shoulders and upper back. Intolerance of Wind. Dislike of Cold. Inflammation. Diarrhea. Muscle spasms. Mucosal swelling. Nasal congestion. Sensitivity to dust. Headache. Wind-Cold Bi (few joints affected, inflammation intense but short lived, changes over days or weeks)

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Lin Syndrome. Contraindicated for those with Yin Deficiency bleeding. Contraindicated for those with bacterial infections (Heat). Contraindicated for those with skin infections. Contraindicated for those with Wind-Heat. Contraindicated for those with a weak pulse. Contraindicated for those with debility. Contraindicated for those with copious urination. Use caution for those with hypertension. Avoid profuse perspiration. Use only for short periods of time.

HERBS AND ACTIONS

-Ge Gen - Releases Exterior conditions and releases the muscles, especially of the neck and upper back by bringing fluids to the area, relieves Heat and generates fluids. With Ma Huang, Gui Zhi and Bai Shao, for Wind-Cold with stiffness and tension in the upper back and neck.

-Ma Huang - Strongly releases the exterior, disperses Cold, moves Lung Qi and stops wheezing. With Gui Zhi for Wind-Cold excess conditions with fever and chills but no sweat and Wind-Cold-Damp Bi.

-Gui Zhi - Releases the exterior, warms the channels and collaterals to relieve pain, warms and facilitates the flow of Yang Qi in the chest, warms and facilitates the flow of Blood through the vessels, adjusts the Ying and Wei and releases the muscle layer. With Ge Gen, releases the exterior and relieves the muscle layer. With Bai Shao, for

External Wind-Cold with disharmony between the Ying and Wei (Tai Yang Zhong Feng), with spontaneous sweating, fever and chills.

-Bai Shao - Adjusts the Ying and Wei and preserves Yin by preventing excessive diaphoresis. With Gan Cao, relieves muscle spasms and therefore helps relieve neck and back stiffness. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration.

-Sheng Jiang - Releases the exterior, disperses Cold, warms the middle, stops vomiting, stops cough and reduces the toxicity of other herbs. With Da Zao, protects the Ying and harmonizes and protects the Stomach. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and Anhidrosis. With Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens. with Ma Huang, strongly creates sweating to treat all externally contracted Wind-Cold disorders, especially those in which Wind-Cold has constrained Lung Qi with cough and wheezing and the failure of Lung Qi to descend causing nausea and vomiting.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, protects the Ying and harmonizes and protects the Stomach.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Common cold. Upper respiratory tract infection. Influenza. Stomach flu. Acute cervical myositis. Tendinitis of shoulder. Bursitis of shoulder. Shoulder pain. Allergic rhinitis. Early-stage poliomyelitis. Early-stage encephalitis. Chronic pediatric diarrhea. Neck pain and stiffness. Frozen shoulder. Pneumonia. Bronchitis. "40 years wrists". "50 years shoulders". Neuralgia. Eczema. Torticollis. Lumbar disc disease. Trigeminal neuralgia. Hypertension. Gingivitis. Iritis. Bacillary dysentery. Soft tissue injuries. Bell's palsy. Scleroderma. Sinusitis. Painful obstruction. Psoriasis. Constipation alternating with diarrhea. Anorexia. Chronic rhinitis. Cervical osteoarthritis. Cirrhosis of the Liver with gynecomastia. Urticaria. Rubella. Furuncles. Boils. Keratitis. Hordeolum. Conjunctivitis. Trachoma. Otitis media. Stuffy nose. Otitis externa. Meningitis. Lymphadenitis. Mastitis. Scarlet fever. Tonsillitis. Rheumatoid arthritis. Lumbago. Cervical spine disease. Periarthritis of the shoulder. Lumbar strain. Cerebral vascular insufficiency. Cerebrovascular disease. Acute enteritis. Fever. Facial paralysis. Tension headache. Painful gynecomastia in Liver cirrhosis. Aqueous flare after complicated cataract surgery. Headache. Gastritis. Diarrhea. Cervical spondylosis. Arthralgia. Gynecomastia. Eclampsia.

* GUI SHAO DI HUANG TANG - 归芍地黄汤 - Angelica, Peony And Rehmannia Formula

ACTIONS - Nourishes the Liver and Kidneys. Tonifies Yin and Blood. Clears Deficiency

Heat.

SYNDROMES - Kidney and Liver Yin and Blood Deficiency.

CLINICAL MANIFESTATIONS - Low back, knees and legs painful and weak. Foot pain. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five-Sole-Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Dry skin. Deafness. Steaming bones. Delayed closing or unclosed fontanel in infants. Tidal fevers. Loose teeth. Dripping urine. Thirst. Dry tongue. Numbness and weakness at the waist and knees. Heel pain. Dry mouth. Dry throat. Blurred vision. Urinary incontinence. Spontaneous and nocturnal emissions. Night sweats.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen Deficiency type diarrhea and indigestion with a white greasy tongue coat. Use caution in areas where diseases are predominantly caused by Dampness. Contraindicated for those with Yang Deficiency.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, regulates the menses, disperses Cold and stops pain due to Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Bai Shao and Fu Ling, for diarrhea during pregnancy with mild abdominal pain.

-Bai Shao - Nourishes the Blood, regulates menstruation, softens the Liver and relieves pain. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis.

-Shu Di Huang - Tonifies the Kidneys and nourishes Jing, Yin and Blood. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating .

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Jing and Yin and stops perspiration. With Shan Yao, tonifies the Liver and Spleen. With Shu Di Huang and Shan Yao, for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and astringes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Mu Dan Pi - Clears Heat, cools the Blood clears and Deficiency Fire.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

TREATS

Dysmenorrhea. Flat warts. Tinnitus. Low back pain. Weakness. Spermatorrhea. Dry skin. Heel pain. Infertility. Parkinson's disease. Deafness. Knee pain. Nocturnal emissions. Toothache. Urinary incontinence. Foot pain.

* GUI ZHI SHAO YAO ZHI MU TANG - 桂枝芍藥知母湯 - Cinnamon Twig, Peony And Anemarrhena Formula

ACTIONS - Unblocks Yang Qi. Promotes the movement of Qi. Dispels Wind. Eliminates Dampness. Clears Heat. Unblocks the channels and collaterals. Stops pain.

SYNDROMES - Recurrent Wind-Cold-Damp Bi. Wind-Damp Bi with formation of Heat. Wind-Phlegm-Dampness with formation of Heat.

CLINICAL MANIFESTATIONS - Swollen painful joints (especially lower limbs). Joints are warm to the touch (may be burning and swollen). The pain is worse at night. Reduced range of motion. Chills. Anhidrosis. Weight loss. Shortness of breath. Muscular atrophy. Difficulty walking and moving. Thirst. Hemiplegia. Rigidity of the limbs. Headache. Dizziness. Vertigo. Nausea. Vomiting. Edema. Emaciation. Swollen feet. Numbness of the extremities. Paralysis. Fatigue.

HERBS AND ACTIONS

-Gui Zhi - Releases the Exterior, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang, transforms Qi and releases the muscle layer. With Ma Huang, for Wind-Cold-Damp Bi. With Bai Shao,for External Wind-Cold with disharmony between the Ying and Wei, with spontaneous sweating. With Fu Zi, for chills and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi and backache due to Wind-Cold Damp Bi.

-Ma Huang - Releases the Exterior, disperses Cold, promotes urination and reduces edema.

-Fu Zi - Disperses Cold, warms the channels, warms the Spleen and dispels Dampness. With Bai Zhu, for Wind-Damp Bi.

-Zhi Mu - Nourishes Yin, moistens Dryness, generates Fluids and ameliorates the

dryness of tonifying or warming herbs.

-Bai Shao - Nourishes Blood, astringes Yin and alleviates pain.

-Bai Zhu - Tonifies the Spleen, tonifies Qi, dries Dampness and stabilizes the exterior.

-Fang Feng - Releases the exterior, expels External Wind-Cold and Heat, expels Wind-Cold-Dampness and alleviates pain.

-Sheng Jiang - Strengthens the spreading and mobilizing actions of the other herbs. With Gan Cao, harmonizes and regulates the Spleen and Stomach.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Rheumatoid arthritis. Connective tissue disorders. Gouty arthritis. Severe migratory arthralgia. Chronic arthritis. Periarthritis of the shoulder. Deep vein thrombosis. Cor pulmonare. Osteoarthritis. Sequelae of cerebrovascular accident. Edema. Arthralgia. Gout. General pain. Hyperpnea. Numbness. Paresthesia. Muscular atrophy in the lower limbs. Psoriasis. Sciatica. Erythema nodosum. Sequelae of cerebrovasculitis with hemiplegia. Low back pain. Paralysis. Painful obstruction.

* GUI ZHI TANG - 桂枝湯 - Cinnamon Twig Formula

ACTIONS - Releases Wind-Cold from the muscle layer. Regulates and harmonizes the Ying and Wei.

SYNDROMES - Wind-Cold attacking the Exterior with deficiency of Ying and Wei. Tai Yang Zhong Feng.

CLINICAL MANIFESTATIONS - Fever and chills unrelieved by sweating. Headache. Spontaneous perspiration. Decreased body resistance. Aversion to Wind. Nasal congestion. No thirst. Dry heaves. Stiff neck.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Exterior Cold with Interior Heat. Contraindicated for those with Tai Yang Shang Han. Contraindicated for those who drink alcohol frequently. Use caution during the summer or spells of hot weather.

NOTES - Porridge should be consumed with this formula to strengthen the Interior.

HERBS AND ACTIONS

-Gui Zhi - Releases the exterior, adjusts the Ying and Wei, warms the channels and

collaterals to relieve pain, disperses Cold, unblocks Yang, transforms Qi and releases the muscle layer.
With Bai Shao, harmonizes the Ying and Wei and warms and tonifies the Middle Jiao.

-Bai Shao - Astringes the Yin and adjusts the Ying and Wei.

-Sheng Jiang - Helps release the exterior, treats nausea and vomiting. strengthens the spreading and mobilizing actions of the other herbs and adjusts the Ying and Wei. With Gan Cao, harmonizes and regulates the Spleen and Stomach. With Da Zao, regulates disharmony between the Ying and Wei. and benefits the Middle Qi.

-Da Zao - Helps Bai Shao regulate the Ying and Wei. With Gan Cao, tonifies and harmonizes the Middle Jiao.

-Gan Cao - Resolves Phlegm, stops cough, clears Heat and moderates and harmonizes the harsh properties of the other herbs.

TREATS

Common cold. Fever. Upper respiratory tract infection. Influenza. Puerperal fever. Allergic rhinitis. Angioedema. Cerebrovascular spasm. Eczema. Bronchial asthma. Testicular pain. Appendicitis. Allergic purpura. Enuresis in children. Headache. Cough. Uterine fibroids. Bronchitis. Hemilateral sweating. Urticaria. Morning sickness. Frostbite. Tinea. Neuralgia. Abdominal pain due to chills. Eclampsia. Neurasthenia. Atrioventricular blockage. Hernia. Sciatica. Itching. Hyperactivity disorder. Psoriasis. Endometriosis. Gastritis. Pneumonia. Spontaneous perspiration. Unilateral pain.

* QI JU DI HUANG WAN - 杞菊地黄丸 - Lycium Fruit, Chrysanthemum And Rehmannia Formula

ACTIONS - Enriches Yin. Nourishes the essence of the Liver and Kidneys. Brightens eyes. Enriches Blood. Increases phagocytic activity. Increases lymphatic transformation. Increases production of immunoglobins. Protects against platelet damage by radiation. Protects against Liver damage by chemicals.

SYNDROMES - Liver (Yin and) Blood Deficiencies. Liver and Kidney Yin Deficiencies (Liver Yin Deficiency is the prominent factor). Liver and Kidney Yin Deficiency with Liver Yang Rising. Liver and Kidney Yin Deficiencies with eye diseases.

CLINICAL MANIFESTATIONS - Dry eyes. Diminished visual acuity. Photophobia. Tearing when exposed to Wind. Painful eyes. Blurred vision. Lower back pain. Weakness of the lower back, knees and extremities. Spontaneous and nocturnal emissions. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five Sole Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder / Xiao Ke. Decreased libido. Maybe constipation. Dizziness. Muscular weakness. Dry skin.

Deafness. Steaming bones. Tidal fevers. Loose teeth. Dripping urine. Thirst. Dry tongue. Numbness and weakness at the waist and knees. Urinary incontinence. Heel pain. Knee pain. Night sweats.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen Deficiency type diarrhea and indigestion with a white greasy tongue coat. Contraindicated for those with Yang Deficiency.

HERBS AND ACTIONS

-Gou Qi Zi - Nourishes and tonifies the liver and Kidneys, brightens eyes and enriches Yin. With Ju Hua, for Liver and Kidney Deficiencies with Jing and Blood unable to rise and nourish the eyes with tinnitus, headache, and visual impairment and Liver Yang Rising or Liver Wind Stirring Internally. With Shu Di Huang, for Liver and Kidney Deficiency.

-Ju Hua - Clears the Liver and eyes, calms the Liver and extinguishes Wind.

-Shu Di Huang - Nourishes Yin and Blood and tonifies the Kidneys. With Shan Yao and Shan Zhu Yu, for dizziness, weak and sore back, impotence, spermatorrhea, night sweats, due to Kidney and Liver Yin Deficiency. With Shan Yao and Ze Xie, for ascendant Fire due to exhaustion of Kidney Yin. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes essence and stops excessive perspiration. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Yao, tonifies the Liver and benefits the Spleen. With Shu Di Huang, Shan Yao and Gou Qi Zi, for True Yin Deficiency.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Mu Dan Pi - Clears Heat and clears Deficiency Fire. With Ju Hua, for dizziness and red, swollen eyes due to ascending Liver Fire.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

TREATS

Diabetes. Glaucoma. Ophthalmalgia. Hyperemia. Loss of muscle power in the feet. Dry mouth. Neurasthenia. Pulmonary tuberculosis. Chronic nephritis. Hyperthyroidism. Chronic glomerulonephritis. Chronic urinary tract infection. Hypertension. Failure to thrive. Functional uterine bleeding. Optic neuritis. Optic nerve atrophy. Central retinitis. Retrobulbar neuritis. Photophobia. Blurred vision. General visual disturbance. Menopause. Cataract. Premenstrual syndrome. Coronary Heart disease. Obesity. Knee pain. Headache. Chronic ocular disorders. Blepharitis. Dizziness. Meniere's disease. Oliguria. Hyperglycemia. Numbness. AIDS/HIV. Constipation. Tinnitus. Deafness. Forgetfulness. Weakness. Hoarseness. Flaccid paralysis. Night sweats. Ascites. Toothache. Dry skin. Urinary incontinence. Unilateral pain. Red, swollen eyes. Nephroatrophy. Senility. Impotence. Spermatorrhea. Esophageal cancer. Chronic asthma. Bronchitis. COPD. Side effects of steroids. Allergic disorders. Bronchiaesthenia. Urticaria. Chronic hepatitis. Nocturnal emissions. Irregular menstruation. Addison’s disease. Congestive Heart failure. Sore throat. Retarded growth in children. Vitreous opacity. Photosensitivity. Redness, swelling and pain of the eyes. Chronic glaucoma. Excessive tearing when exposed to Wind. Tourette syndrome. Atherosclerosis. Stroke. Retinitis pigmentosa. Insomnia. Conjunctivitis. Cough. Vertigo. Kidney Failure. Hematuria. Paresthesia. Anemia. Fever. Neurosis. Low back pain. Hypotension. Amenorrhea. Hyperlipoproteinemia. Palpitations. Macular degeneration. Premenstrual tension. Hemiplegia. Sjogren's Syndrome. Dysmenorrhea. Heel pain. Eye pain. Poor vision associated with AIDS/HIV.

* YI QI CONG MING TANG - 益氣聰明湯 - Ginseng, Astragalus And Pueriara

ACTIONS - Strengthens and raises the Qi of the Middle Jiao. Improves visual and aural acuity.

SYNDROMES - Long-term Middle Jiao Qi Deficiency with visual and aural disturbances.

CLINICAL MANIFESTATIONS - Pterygium. Tinnitus. Hearing loss. Diminished visual and aural acuity. Blurred vision. Abdominal pain. Dizziness. Light headedness. Anorexia. Spontaneous sweating. Chronic diarrhea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not use if eye and ear disorders are due to Excess. Avoid exposure to smoke and fire and refrain from eating sour, cold, raw, oily or greasy foods while taking this formula.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen and raises the Yang Qi of the Spleen and Stomach. With Ren Shen, for Qi Deficiency with general debility, anorexia, and spontaneous sweat. With Sheng Ma, raises Yang Qi of the Spleen, allowing turbid Yin to descend and be eliminated, treating chronic diarrhea, a dragging sensation in the

abdomen, fatigue, shortness of breath, uterine bleeding and prolapses.

-Ren Shen - Tonifies Spleen and Stomach Qi.

-Gan Cao - Tonifies the Spleen and augments Qi. With Ren Shen, relieves palpitations and anxiety. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency.

-Sheng Ma - Raises Yang and lifts Sunken Qi.

-Ge Gen - Raises Spleen Yang and stops diarrhea.

-Man Jing Zi - Disperses Wind, clears Heat and clears and benefits head and eyes. With Ren Shen and Huang Qi, for eye disease, tinnitus, dizziness, and deafness due to deficiency. With Bai Shao, soothes the Liver.

-Bai Shao - Nourishes Blood and astringes Yin. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach, muscle spasms, especially in the calf, due to Blood Deficiency and regulates the relationship between the Liver and Spleen and nourish sinews. With Huang Qi and Ren Shen, astringes sweating from Deficiency.

-Huang Bai - Cools Upper Jiao Blood Heat, invigorates the Blood and disperses Stasis.

TREATS

Pterygium. Tinnitus. Hearing loss. Presbycusis. Age related hearing loss. Obstructive visual disturbances. Chronic visual disturbances. Cognitive dysfunction. Hypoacusis. Dizziness. Forgetfulness. Cerebral thrombosis. Cerebral arteriosclerosis. Cataract. Vertigo. Otitis media. Colitis. Tic douloureux. Optic atrophy. Anorexia. Ulcerative colitis.

1.3.3.5 RT-TCM-05

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_05

Bu Gan Tang, Gu Ben Wan, Guan Xin Er Hao, Gui Zhi Jia Fu Zi Tang, Lian Po Yin, Ma Huang Fu Zi Xi Xin Tang, Si Miao Wan, Xiao Chai Hu Tang, Yi Qi Huo Xue Tong Luo

Recordings Updated in May 2025

* BU GAN TANG - 補肝汤 - Tonify The Liver Formula

ACTIONS - Tonifies and Regulates Blood. Nourishes Liver Yin.

SYNDROMES - Liver Wind Stirring Internally: Liver Blood Deficiency Generates Wind. Liver Yin and Blood Deficiency.

CLINICAL MANIFESTATIONS - Headache. Dizziness. Tinnitus. Dry eyes. Photophobia. Blurred vision. Irritability. Numbness. Bad temper. Muscle twitches. Malar flush. Fatigue.

HERBS AND ACTIONS

-Dang Gui - Nourishes, invigorates and harmonizes the Blood. With Bai Shao, regulates and harmonizes Blood. With Bai Shao, Shu Di Huang and Chuan Xiong, for menstrual irregularity, amenorrhea and dysmenorrhea due to Blood Deficiency or Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood and promotes Qi movement. With Dang Gui, for Blood Deficiency causing menstrual problems.

-Bai Shao - Nourishes the Blood, regulates the menses, calms Liver Yang and preserves Yin. With Gan Cao, for muscle spasms, especially in the calf, due to Blood Deficiency.

-Shu Di Huang - Nourishes Blood and nourishes Liver and Kidney Yin. With Dang Gui and Bai Shao, for dizziness, insomnia, palpitations and menstrual dysfunction due to Blood Deficiency.

-Suan Zao Ren - Nourishes Heart Yin, augments Liver Blood, calms the Shen and astringes perspiration.

-Mu Gua - Increases Qi and Blood circulation, unblocks the channels and harmonizes the Stomach With Dang Gui and Bai Shao, for muscle spasms due to Blood Deficiency.

-Gan Cao - Tonifies Qi, moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Dang Gui, moderates spasms.

TREATS

Photophobia. Anemia. Headache. Amenorrhea. Late menstruation. Dizziness. Paresthesia. Parkinson' disease. Tinnitus. Neurasthenia. Weakness. Scanty menstruation. Dandruff. Muscle spasms. Malaise. Dry eyes. Chronic fatigue syndrome. Insomnia. Vertigo. Numbness. AIDS/HIV. Neurosis. Hypotension. Fatigue. Unilateral pain

* GU BEN WAN - 固本丸 - Formula To Strengthen The Body. Replenish the Root Formula

ACTIONS - Enriches Yin. Moistens Dryness.

SYNDROMES - Dryness. Lung Yin Deficiency. Stomach Yin Deficiency. Lung Dryness.

CLINICAL MANIFESTATIONS - Forgetfulness. Constipation. Excess thirst. Dry mouth and/or throat. Dry skin. Chronic cough (usually dry). Night sweats. Fatigue.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Discontinue use during the early stages of acute infection or illness, such as cold or flu. Do not use for Stagnation of Phlegm or Dampness. Use with caution in Spleen deficient patients with a tendency toward loose stools, diarrhea, poor appetite or chronic digestive weakness.

HERBS AND ACTIONS

-Tian Dong - Nourishes Kidney Yin, clears Lung Heat, sedates Fire, moistens the Lungs, nourishes the Kidneys, generates fluids and resolves Phlegm.

-Mai Dong - Moistens the Lungs, nourishes Yin, stops coughing, nourishes Stomach Yin, generates Fluids and moistens the Intestines. With Tian Dong, for Lung and Kidney Yin Deficiency with consumptive coughing and occasional hemoptysis. With Di Huang, for hematemesis or epistaxis due to Yin Deficiency with Excess Heat.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin, generates fluids and cools Heart Fire. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, tonifies the Lungs, nourishes the Blood and promotes the generation of Body Fluids.

-Hua Shi - Promotes urination and drains Heat from the Urinary Bladder.

TREATS

Forgetfulness. Cough. Diabetes. Night sweats. Nephritis. Constipation. Hyperthyroidism. Dry skin.

* GUAN XIN ER HAO - 冠心二号 - Recipe #2 For Coronary Heart Disease

ACTIONS - Invigorates the Blood. Promotes the movement of Qi. Dispels Blood Stasis.

Relieves pain. Clears Heat. Cools the Blood.

SYNDROMES - Blood Stagnation.

CLINICAL MANIFESTATIONS - Palpitations. Stabbing pain in the anterior region over the Heart. Suffocating sensation in chest or oppressed sensation in the sternum. Maybe drawing pain down internal aspect of arm or back (especially the left arm). Pain (in chest and/or arm) tends to be severe and intermittent. In severe cases: Cold limbs. Cyanosis of lips and nails.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with menorrhagia. Contraindicated for those with Blood Deficiency without Stasis. Contraindicated during pregnancy.

NOTES - Modern research has shown that this formula has remarkable effects in dilating the coronary artery, increasing the volume of Blood flow of the coronary artery, raising the hypoxia tolerance of the cardiac muscle, inhibiting thrombosis, promoting the activity of the fibrinolytic system, inhibiting platelet aggregation and promoting the restoration of necrotic cardiac muscle.

HERBS AND ACTIONS

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat and soothes irritability.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat and cools the Blood.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

-Jiang Xiang - Disperses Blood Stasis, stops bleeding, invigorates the Blood, promotes the movement of Qi and alleviates pain. With Dan Shen, for Angina pectoris .

TREATS

Chronic obstructive cerebral vascular disease. Angina pectoris. Cerebral thrombosis. Palpitations. Acute myocardial infarction. Myocardial ischemia. Cerebral embolism. Stroke. Coronary Heart disease.

* GUI ZHI JIA FU ZI TANG - 桂枝加附子湯 - Cinnamon Twig And Prepared Aconite

ACTIONS - Expels Wind-Cold. Harmonizes the Ying and Wei. Restores Yang. Disperses Cold. Stops perspiration.

SYNDROMES - Complication of Tai Yang Zhong Feng. Wind-Cold Invasion with underlying Yang Deficiency. Wind-Cold-Damp-Bi.

CLINICAL MANIFESTATIONS - Chills. Mild fever. Aversion to Wind. Continuous perspiration (like leaking water). Difficult urination. Muscle spasms. Difficulty with flexing and extending the legs. Cold limbs. Chest pain referring to the back. A feeling of oppression over the chest. Stiff extremities. Painful urination. Generalized aches and pains. Difficulty rotating the trunk. Headache. Fatigue. Somnolence.

HERBS AND ACTIONS

-Gui Zhi - Releases the exterior, adjusts the Ying and Wei, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang, transforms Qi and releases the muscle layer. With Bai Shao, harmonizes the Ying and Wei and warms and tonifies the Middle Jiao. With Fu Zi, for backache due to Wind-Cold Damp Bi and chills, painful extremities and difficulty in rotating the trunk due to Yang Deficiency with Wind-Cold-Damp Bi.

-Bai Shao - Alleviates pain, nourishes the Blood, astringes Yin and adjusts the Ying and Wei. With Gui Zhi. harmonizes the Ying and Wei in Tai Yang Zhong Feng. With Gan Cao, for muscle spasms, especially in the calf, due to Blood Deficiency.

-Sheng Jiang - Helps release the exterior, treats nausea and vomiting, disperses Cold, strengthens the spreading and mobilizing actions of the other herbs and adjusts the Ying and Wei. With Zhi Gan Cao, harmonizes and regulates the Spleen and Stomach. With Da Zao, regulates disharmony between the Ying and Wei. and benefits the Middle Qi. With Da Zao and Gui Zhi, benefits the Middle Qi, regulates the Ying and Wei, warms the channels and circulates Qi and Blood.

-Da Zao - Strengthens the Spleen, tonifies Qi, nourishes the Blood and moderates and harmonizes the harsh properties of the other herbs. With Gan Cao, tonifies the Middle Jiao and harmonizes.

-Gan Cao - Alleviates pain and moderates and harmonizes the harsh properties of the other herbs.

-Fu Zi - Disperses Cold-Dampness, warms the channels and reduces pain.

TREATS

Ephidrosis. Muscle spasms of the extremities. Neuralgia. Dysuria. Common cold. Influenza. Mild fever. Bronchitis. Continuous perspiration. Painfull obstruction.

Rheumatoid arthritis. Arthralgia. Sciatica. Motor paralysis. Rheumatic arthritis. Chest pain due to Wind-Phlegm. Pneumonia. Fatigue. Abdominal pain.

* LIAN PO YIN - 蓮朴飲- Coptis And Magnolia Bark Formula

ACTIONS - Clears Heat. Transforms Dampness. Regulates Qi. Harmonizes the Middle Jiao.

SYNDROMES - Damp-Heat in the Middle Jiao. Sudden Turmoil Disorder. Phlegm-Fire. Summerheat and Dampness.

CLINICAL MANIFESTATIONS - Simultaneous vomiting and diarrhea. Focal distention in the chest and epigastrium. A stifling sensation in the chest and epigastrium. Irritability. Acid regurgitation. Anorexia. Restlessness. Fatigue. Abdominal pain. A bitter taste in the mouth. Dark, scanty, possibly reddish urine.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only for Damp-Heat type sudden turmoil disorder. Contraindicated for those with Cold-Dampness.

HERBS AND ACTIONS

-Huang Lian - Cools Stomach Fire and Heat, alleviates nausea and descends rebellious Qi.

-Hou Po - Harmonizes the Stomach with a strong ability to promote the flow of Qi to treat rebellious Qi causing wheezing and nausea. With Huang Lian, for acute diarrhea associated with sudden turmoil disorder from Damp-Heat.

-Zhi Zi - Reduces rebellious Stomach Qi while clearing Heat agitation. With Dan Dou Chi, for insomnia and irritability from Deficiency due to Heat lingering in the chest.

-Dan Dou Chi - Reduces Food Stagnation and harmonizes the Middle Jiao.

-Shi Chang Pu - Transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen and promotes the movement of Qi. With Huang Lian and Hou Po, for sudden turmoil disorder from smoldering Damp-Heat.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, stops vomiting and harmonizes the Stomach. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach. With Hou Po, for Phlegm-induced cough, vomiting, and epigastric and abdominal distention.

-Lu Gen - Clears Stomach Heat, regulates Stomach Qi, relieves thirst, relieves food poisoning and stops vomiting. With Zhi Zi, for irritability.

TREATS

Bacterial dysentery. Acute gastroenteritis. Typhoid. Paratyphoid. Peptic ulcers. Infectious hepatitis. Chronic hepatitis. Salmonella food poisoning. Acute gastritis. Abdominal fullness and distention. Parasites. Fever. Myalgic encephalomyelitis. Abdominal pain. Anorexia. Night sweats. Asthma. Superficial gastritis. Gastritis. Duodenal ulcer. Stomach influenza. Acid reflux. Viral enteritis. Cholecystitis. Oliguria. Nausea/Vomiting. Chronic fatigue syndrome. Epstein-Barr virus syndrome. Diarrhea. Chronic colitis. Fatigue. Sweating from the hands and feet.

* MA HUANG FU ZI XI XIN TANG - 麻黃細辛附子湯 - Ephedra, Prepared Aconite And Asarum

ACTIONS - Disperses Wind-Cold. Replenishes Yang.

SYNDROMES - Wind Cold with Underlying Yang Deficiency. Tai Yang - Shao Yin. Headache due to Deficiency Cold. Kidney coughing (characterized by pain penetrating to the back).

CLINICAL MANIFESTATIONS - Sensation of extreme Cold. Severe chills. Chills are not relieved by clothing or covers. Slight fever. Anhidrosis. Exhaustion. Almost constant desire to sleep. Pale face. Cold extremities. Cold feet. Severe aversion to Cold. Headache. Shortness of breath. Fatigue. Joint pain. Edema. Cough. Pain penetrating to the back. Toothache. Sore throat. Raspy voice. Edema due to Wei Qi Stagnation. Weak extremities. Chronic wheezing. Severe pain and obstructed feeling over the throat.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only with mild Yang Deficiency. Do not use for those without Yang Deficiency. Contraindicated during pregnancy and while nursing. Contraindicated for those with Heat Excess and/or Dryness. Contraindicated for those with Yin Deficiency. This formula has successfully treated elderly patients with fever caused by bacterial infection of unknown origin who failed to respond to ofloxacin. This formula is a possible alternative treatment for fever that does not respond to antibiotics more at least three days.

HERBS AND ACTIONS

-Ma Huang - Strong diaphoretic, relieves the Exterior and dispels External Cold. With Fu Zi, for Wind-Cold Bi.

-Fu Zi - Stimulates Yang, warms the Interior and warms the channels. With Xi Xin, disperses Cold and stops pain for Cold damage both Internal and External with aversion to Cold, headache and generalized body aches with aching joints and Wind-Damp-Cold Bi with spasms of the joints and intolerable pain. With Ma Huang and Xi Xin, for Wind-Cold Attack with preexisting Yang Deficiency.

-Xi Xin - Releases Exterior Wind and Cold, disperses Wind-Cold and Internal Cold, alleviates pain, assists Ma Huang to release the Exterior, helps Fu Zi disperse Cold and focuses the actions of the formula on the Shao Yin. With Ma Huang, alleviates Wind-Cold-Damp Bi pain.

TREATS

Acute laryngitis. Chronic laryngitis. Kidney coughing. Skin disorders. Fibromyalgia. Connective tissue disorders. Sick sinus syndrome. Allergic rhinitis. Measles. Pneumonia. Trigeminal neuralgia. Bronchitis. Headache. Rhinitis. Sudden dysphonia. Emphysema complicated by infection. Acute exacerbation of chronic nephritis. Fatigue. Hypothyroidism. Acute exacerbation of chronic prostatitis. Acute exacerbation of prostatic hypertrophy. Impotence. Arthralgia. Toothache. Rheumatoid arthritis. Alopecia. Common cold in weak and elderly patients. Bronchial asthma. Influenza. Allergies. Arthritis. Blood vessel and nerve disorders. Chronic bronchitis. Pertussis. Viral pneumonia. Rheumatic arthritis. Facial paralysis. Sciatica. Sinusitis. Chronic pharyngitis. Chronic obstructive pulmonary disease. Skin Bi. Edema. Nephrotic syndrome. Acute exacerbation of chronic glomerulonephritis. Urticaria. Dyspnea. Peripheral neuropathy.

* SI MIAO WAN - 四妙丸 - Four Marvel Formula

ACTIONS - Eliminates Heat. Resolves Dampness.

SYNDROMES - Damp-Heat in the Lower Jiao. Atrophy disorder (Wei syndrome).

CLINICAL MANIFESTATIONS - Pain in low back and knees. Weakness or atrophy of lower extremities. Scanty yellow urine. Red, hot, swollen and painful feet or knees. Edema in lower legs. Eczema. Painful and swollen feet. Pain and swelling of the joints. Leukorrhea (thick, yellow and foul-smelling). Sores on lower extremities due to Damp. Severe numbness and weakness in lower extremities.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Modify for Lung Heat or Liver and Kidney Deficiency.

HERBS AND ACTIONS

-Huang Bai - Drains Damp-Heat, especially from the Lower Jiao and drains Kidney Fire.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, and clears Dampness from the Lower Jiao. With Huang Bai, for pain, swelling, and weakness of the lower extremities or skin lesions due to Wind-Dampness.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, clears Damp-Heat in the Lower

Jiao and regulates water metabolism.

-Yi Yi Ren - Promotes urination, leaches out Dampness, strengthens the Spleen, expels Wind-Dampness and clears Damp-Heat. With Huang Bai, Cang Zhu and Niu Xi, for Damp-Heat pouring downward leading to atrophy and weakness of the lower extremities.

TREATS

Urinary tract infection. Vaginitis. Cervicitis. Beriberi. Rheumatoid arthritis. Gouty arthritis. Osteoarthritis. Purulent otitis media. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Knee pain. Edema. Sciatica. Polymyositis/Dermatomyositis. Heel pain. Rheumatic fever. Vaginal discharge. Gonococcal arthritis. Low back pain. Tinea pedis. Eczema. Gonorrhea. Fibromyalgia. Prolonged menstruation. Atrophy (Wei) Syndrome. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Acute infectious multiple neuritis. Weakness. Impotence. Herniated lumbar disc. Peripheral neuropathy. Gout. Cervical polyps. Menorrhagia.

* XIAO CHAI HU TANG - 小柴胡汤 - Minor Bupleurum Formula

ACTIONS - Harmonizes and releases Shao Yang Stage disorders. Relieves the Liver. Harmonizes the Liver and Spleen.

SYNDROMES - Shao Yang Stage disorders. Gu Syndrome. Liver Qi Stagnation with Spleen Dampness. Heat in the Liver, Gallbladder, Stomach and/or Lungs.

CLINICAL MANIFESTATIONS - Alternating chills and fever. Dry throat. Bitter or sour taste in the mouth. Dizziness. Sensation of fullness in the chest and hypochondrium. Irritability. Heartburn. Chest distention. Difficulty taking deep breaths. Hardness beneath the Heart. Hypochondriac pain with pressure. Stress. Being downcast with no desire to eat. Anorexia. Vertigo. May be palpitations. Dysphoria. Retching. Abdominal pain. Stomach ache. Reduced appetite. Subcostal bloating. Depression. Amenorrhea. Tendency to diarrhea. Nervousness. Nausea. Vomiting. May be urinary dysfunction. Restlessness. Sometimes fatigue. Headaches (side of head). Rib pain. Achiness. Ear infection. Hearing difficulty. Red eyes. Stiff shoulders. Throat pain. Hip pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Excess above and deficiency below. Contraindicated for those with Liver Fire. Contraindicated for those with bleeding gums. Use with caution for those with Liver Yang Rising. Use with caution for those with hypertension. Use with caution for those with hematemesis due to Yin Deficiency. Use with caution for those with Yin and/or Blood Deficiency. Acute Pneumonitis maybe associated with interferon in combination with this formula. Concurrent use of this formula and Interleukin 2 may have a

synergistic anti-tumor effect against murine renal cell carcinoma. Concurrent use of this formula and antiviral drugs such as zidovudine (AZT), lamivudine (3TC), or AZT plus 3TC may have a synergistic antiviral effect. Concurrent use of this formula and 5-fluorouracil (5-FU) may have a synergistic in treating of cancer. This formula has a beneficial effect in preventing and/or treating damage induced by drugs such as halothane, danazol, D-galactosamine, and carbon tetrachloride.

HERBS AND ACTIONS

-Chai Hu - Resolves Shao Yang disorders, reduces fever, spreads Liver Qi and relieves Stagnation. With Huang Qin, for Heat in the Shao Yang with alternating chills and fever, and nausea and for restoring normal function of the Liver and Gallbladder. With Huang Qin, Ban Xia and Ren Shen, for Shao Yang Heat. With Huang Qin, Ban Xia, Ren Shen and Gan Cao, for weak patients.

-Huang Qin - Clears Lung Heat, drains Fire and calms ascending Liver Yang.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, harmonizes the Stomach and stops vomiting. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting. With Sheng Jiang, for vomiting due to Cold, Thin Mucus.

-Sheng Jiang - Releases the exterior, disperses Cold, stops vomiting, stops cough and reduces the toxicity of other herbs. With Da Zao, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen. With Ban Xia, for vomiting and productive cough due to Phlegm-Dampness.

-Ren Shen - Tonifies Yuan, Spleen, Stomach, Lung and Heart Qi.

-Gan Cao - Resolves Phlegm, stops cough, clears Heat. and moderates and harmonizes the properties of other herbs. With Ren Shen, relieves palpitations and anxiety. With Sheng Jiang, enhances the effects of other Qi and Blood tonifying herbs by facilitating their digestion and absorption.

-Da Zao - Strengthens the Spleen, tonifies Qi and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, enhances effects of other Qi and Blood tonifying herbs by facilitating their digestion and absorption.

TREATS

Upper respiratory tract infection. Influenza. Acute bronchitis. Chronic bronchitis. Bronchial asthma. Cough. Laryngitis. Fever. Pulmonary tuberculosis. Epidemic parotitis. Jaundice. Malaria. Chronic hepatitis. Viral hepatitis. Hepatic fibrosis. Postpartum fever. Acute pyelonephritis. Cholecystitis. Lymphadenitis. Intercostal neuralgia. Weak digestion. Chronic hepatitis. Gastroptosis. Ulcer. General weakness. Prolonged cold/flu. Common cold with lingering fever. Acute pancreatitis. Conjunctivitis. Perimenstrual

fevers. Premenstrual syndrome. Angina pectoris. Hepatocellular carcinoma. Nephritis. Acute parotitis. Measles. Meniere's disease. Depression. Dysmenorrhea. Morning sickness. Candidiasis. Amenorrhea. Infertility. Endometriosis. Dizziness. Tracheitis. Croup. Gu syndrome. Nausea/Vomiting. Otitis media. Abdominal pain. Stress. Chronic sinusitis. Herpes genitalia. Hyperthyroidism. Hypoglycemia. Asthmatic bronchitis. Night sweats. Myalgic encephalomyelitis. Temporomandibular joint syndrome (TMJ). Red eyes. Vegetative neurosis. AIDS/HIV. Irritable bowel syndrome. Allergic rhinitis. Postpartum infection. Reflux esophagitis. Fever in cancer. Hepatic carcinoma. Pneumonia. Pleuritis. Pleurisy. Cholelithiasis. Gastritis. Antral gastritis. Indigestion. Sour Stomach. Acute tonsillitis. Chronic tonsillitis. Stomatitis. Suppurative otitis media. Mumps. Neck stiffness. Epilepsy. Seizures. Pyelitis. Puerperal fever. Stuttering. Impotence in young men. Neurosis. Alopecia. Mental instability in children. Biliary tract infection. Typhoid fever. Migraine headache. Periaural eczema. Mastitis. Chronic renal insufficiency. Chronic fatigue syndrome. Leaky gut syndrome. Giardiasis. Chronic peptic ulcers. Headache. Acne. Uterine fibroids. Vertigo. Acute laryngitis. Periarthritis of the shoulder. Constipation in the elderly. Morning sickness. Meniere's disease. Schizophrenia. Low back pain. Anorexia. Fatigue. Hoarseness. Interstitial cystitis. Palpitations. Oral leukoplakia. Indigestion. Hip pain. Thyroid cancer.

* YI QI HUO XUE TONG LUO - Diabetic Peripheral Neuropathy Formula (YQHXTLF)

Boost the Qi, Quicken the Blood and Free the Flow of the Network Vessels.

YQHXTLF is an in-hospital preparation for the prevention and control of diabetic peripheral neuropathy at Anhui Provincial Hospital of Traditional Chinese Medicine. It consists of 7 Chinese herbal medicines: Astragalus (Huangqi), Radix Angelicae Sinensis (Danggui), Radix et Rhizoma Dioscoreae (Dihuang), Radix et Rhizoma Yanhusuo (Yanhusuo), Radix et Rhizoma Puerariae (Gegen), Radix et Rhizoma Chrysanthemum (Jixueteng), and Radix et Rhizoma Weilingensis (Weilingxian). The combination of all the herbs in this formula can treat both the symptoms and the root cause of pain by treating Qi and blood together, which can benefit Qi and invigorate blood, as well as promote circulation and relieve pain. Preliminary clinical studies have shown that this formula can alleviate abnormal skin sensation, numbness, and tingling in the limbs and improve motor nerve conduction speed and sensory nerve conduction speed in DPN patients. Basic research found that this formula can reduce islet cell damage in db/db mice, improve blood flow in the sciatic nerve area, and promote the repair and regeneration of damaged nerves, and the mechanism of action may be related to the improvement of diabetic inflammatory lesions and inhibition of excessive activation of the MAPK signaling pathway. However, due to the multicomponent and multitarget nature of the Chinese medicine formula, the exact mechanism of action of the formula is still unclear.

1.3.3.6 RT-TCM-06

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_06

Gu Zhi Zeng Sheng Wan, Huo Luo Xiao Ling Dan, Interstitial Cystitis #2, Juan Bi Tang #1, Ma Huang Jia Zhu Tang, Ma Xing Yi Gan Tang, Wu Tou Tang, Xiao Yao San, Zi Yun Gao

Recordings Updated in May 2025

* GU ZHI ZENG SHENG WAN - 骨窒增生囊 - Osteophyte Formula

ACTIONS - Warms Yang. Tonifies the Blood. Disperses Cold. Eliminates Stagnation.

SYNDROMES - Blood and Yang Deficiency with Cold.

CLINICAL MANIFESTATIONS - Localized painful swellings without a head that bleed into the surrounding tissues and do not affect the color or texture of the skin. The swellings are not hot to the touch. No thirst. Swollen and painful joints. Wasting of the muscles of the thigh and calf.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood Nourishes Liver and Kidney Yin.

-Lu Xian Cao - Dispels Wind-Dampness, strengthens the sinews and bones and invigorates Blood circulation. With Yin Yang Huo, Gui Sui Bu and Ji Xue Teng, for bone spurs.

-Gu Sui Bu - Tonifies Kidney Yang, strengthens the sinews and bones and invigorates the Blood.

-Rou Cong Rong - Tonifies the Kidneys and strengthens Yang.

-Ji Xue Teng - Invigorates and tonifies the Blood, activates the channels and relaxes the sinews.

-Yin Yang Huo - Dispels Wind-Cold-Dampness, warms and unblocks the flow of Yang Qi and strengthens the sinews and bones.

-Lai Fu Zi - Reduces Food Stagnation, transforms accumulation, promotes digestion, eliminates distention, descends Qi and reduces Phlegm.

TREATS

Bone spurs.

* HUO LUO XIAO LING DAN - 活絡效靈丹 - Fantastically Effective Formula To Invigorate The Channels. Salvia and Boswellia Formula

ACTIONS - Invigorates the Blood. Dispels Blood Stasis. Unblocks the collaterals. Alleviates pain.

SYNDROMES - Pain due to Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - Heart pain. Headache. Stomach pain. Abdominal pain. Back pain. Leg pain. Arm pain. Bruising and swelling due to traumatic injury. Rheumatic pain. Fixed abdominal masses. Internal or external ulcerations. Dark or echymosis spots. Scrofula.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy. Contraindicated for those without Blood Stasis.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Dan Shen and Mo Yao, for pain due to Blood Stasis in the extremities.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, nourishes the Blood and calms the Spirit. With Dang Gui, for irregular menstruation and retained lochia from Blood Stasis due to trauma. With Ru Xiang, for Blood Stasis causing swelling and pain.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, invigorates the channels, reduces swelling, generates flesh and alleviates pain. With Mo Yao, for traumatic injury pain, Blood Stasis obstructing the channels with epigastric, flank abdominal and joint pain, abdominal pain during menstruation, Wind-Cold-Damp Bi with numbness throughout the body and unresponsive extremities and chronic, ulcerated and non-healing sores.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, reduces swelling, generates flesh, promotes healing and alleviates pain.

TREATS

Bi Syndrome. Angina pectoris. Cerebral thrombosis. Post-concussion syndrome. Sciatica. Traumatic injury. Heel pain. Coronary artery disease. Thromboangitis obliterans. Hysteromyoma. Abdominal pain. Low back pain. Neck pain and stiffness.

Restless leg syndrome. Pelvic inflammatory disease. Ectopic pregnancy. Arthritis. Carbuncles. Furuncles. Ischemic stroke. Cerebrovascular accident. Cervical spondylosis. Gastralgia. Abdominal masses. Irregular menstruation.

* INTERSTITIAL CYSTITIS #2 Formula

ACTIONS - Tonifies Kidney Yang. Nourishes Kidney Yin. Clears Heat.

SYNDROMES - Kidney Qi Deficiency.

CLINICAL MANIFESTATIONS - Frequent urination. Copious amounts of clear urine. Incontinence of urine. Enuresis. Dizziness. Restlessness. Either a tendency towards being too hot of too cold. Diarrhea or. Constipation. Shortness of breath. Asthma. Cold limbs. Weak back and knees. Amenorrhea. Abortion or miscarriage. Thirst.

HERBS AND ACTIONS

-Zhi Zi - Clears Heat, reduces Fire, drains Damp-Heat, cools the Blood, relieves toxicity reduces swelling and invigorates the Blood. With Da Huang, for constipation.

-Da Huang - Drains Heat, purges accumulations, transforms Dampness, promotes urination, invigorates the Blood and dispels Blood Stasis.

-Shu Di Huang - Nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu and Shan Yao, for dizziness, a weak and sore back, impotence, spermatorrhea and night sweats, due to Kidney and Liver Yin Deficiency.

-Shan Yao - Tonifies Kidney Yin and astringes Jing. With Shan Zhu Yu and Tu Si Zi, for leukorrhea due to Spleen and Kidney Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine, benefits the marrow and tonifies the Kidneys and Liver.

-Xian Mao - Tonifies the Kidneys, strengthens Yang, expels Cold and eliminates Dampness.

-Ba Ji Tian - Tonifies the Kidneys and strengthens Yang.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin, moistens Dryness, generates Fluids and clears Deficiency Fire.

TREATS

Interstitial cystitis.

* JUAN BI TANG #1 - 蠲痺湯一 号 - Remove Painful Obstruction Formula #1. Notopterygium and Turmeric Combination

ACTIONS - Tonifies and harmonizes the Ying and Wei. Tonifies Qi. Nourishes Blood. Dispels Wind. Eliminates Dampness.

SYNDROMES - Wind-Cold-Damp Bi with Qi and Blood Deficiency with Wind or Dampness predominant. Wind-Cold-Damp Bi with disharmony of the Ying and Wei.

CLINICAL MANIFESTATIONS - A generalized sensation of heaviness. Neck, shoulder, elbow and upper back stiffness. Numbness of the extremities. Difficulty moving. Wandering joint pain, especially in the neck, shoulder, upper back and elbow. Upper back spasms. Immobility of the joints. Wandering joint pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Wind-Damp-Heat Bi.

NOTES - This formula is especially useful for the upper body.

HERBS AND ACTIONS

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction (Bi), alleviates pain, increases joint mobility and guides Qi to the Tai Yang and DU channels. With Fang Feng, for pain due to External Wind-Dampness. With Fang Feng and Jiang Huang, for Wind-Cold-Damp Bi. With Fang Feng, Dang Gui, Gan Cao and Jiang Huang, for muscle aches and joint pain due to Wind-Cold-Dampness.

-Jiang Huang - Expels Wind,invigorates Blood, promotes the movement of Qi and opens the channels and collaterals to alleviate pain. With Qiang Huo, Fang Feng and Dang Gui, for Wind-Damp Bi, especially of the shoulder.

-Dang Gui - Nourishes Blood, invigorates and harmonizes Blood, disperses Cold and stops pain. With Huang Qi, for Qi and Blood Deficiency. With Bai Shao, regulates and harmonizes Qi and Blood.

-Huang Qi - Tonifies Qi and Blood, tonifies Wei Qi, stabilizes the exterior and relieves numbness and pain. With Qiang Huo and Jiang Huang, for Wind-Damp painful

obstruction of the shoulder.

-Bai Shao - Nourishes the Blood and adjusts the Ying and Wei. With Gan Cao, for muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency. With Dang Gui, nourishes Yin and Blood.

-Fang Feng - Releases the exterior, expels Wind-Dampness and alleviates pain. With Qiang Huo and Dang Gui, for Wind-Cold-Damp Bi.

-Gan Cao - Moderates and harmonizes the harsh properties of the other herbs and prevents injury to normal Qi.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, for External Wind-Cold.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, adjusts the Ying and Wei and normalizes the flow of Qi at the center. With Da Zao, protects the Stomach Qi and reduces irritation of the gastrointestinal tract by other herbs.

TREATS

Periarthritis of the shoulder. Osteoarthritis. Bursitis. Tennis elbow. Neck pain and stiffness. Upper back pain. Rheumatoid arthritis. Gouty arthritis. Frozen shoulder. Lumbago. Arthralgia.

* MA HUANG JIA ZHU TANG - 麻黄加术汤 - Ephedra Formula Plus Atractylodes

ACTIONS - Disperses Wind-Cold. Induces diaphoresis. Dispels Dampness.

SYNDROMES - Wind-Cold Invasion with Damp Accumulation (best for patients with pre-existing Dampness).

CLINICAL MANIFESTATIONS - Itching or tickling in the throat. Wheezing. Sneezing. Gasping. Cough with expectoration of thin, watery or frothy white sputum. General body aches. No thirst. Dyspnea. Headache. Body aches. A sensation of heaviness. Chills with low grade fever. Maybe asthma. Intolerance of Cold. Anhidrosis. Blocked and/or runny nose with watery nasal discharge. Chest discomfort. Neck stiffness. Irritability.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Lin Syndrome. Contraindicated for those with Yin Deficiency bleeding. Contraindicated for those with bacterial infections (Heat). Contraindicated for those with skin infections. Contraindicated for those with Wind-Heat. Contraindicated for those with a weak pulse. Contraindicated for those with debility. Contraindicated for those with copious urination. Use caution for those with hypertension. Avoid profuse perspiration.

Use only for short periods of time. This formula may reduce the adverse effects of interferon in hepatitis C patients.

HERBS AND ACTIONS

-Ma Huang - Strongly promotes diaphoresis, relieves the Exterior, disperses Lung Qi, promotes urination and expels Cold. With Gui Zhi, for Wind-Cold Excess with fever, chills and anhidrosis and Wind-Cold-Damp Bi. With Xing Ren, for cough and wheezing due to Wind-Cold Attacks the Lungs.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness, promotes water metabolism, stabilizes the exterior and stops sweating.

-Gui Zhi - Promotes diaphoresis, warms the channels, disperses Cold, releases the exterior, assists the Yang, adjusts the Ying and Wei, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels and releases the muscle layer. With Gan Cao, for palpitations and shortness of breath due to injured Yang of the chest.

-Xing Ren - Disperses Lung Qi, resolves Phlegm and stops cough and wheezing. With Ma Huang and Gan Cao, for cough with profuse sputum, nasal obstruction and a hoarse voice.

-Gan Cao - Tonifies Qi, resolves Phlegm, stops cough and moderates and harmonizes the harsh properties of other herbs. With Ma Huang and Xing Ren, for Wind-Cold Attacks the Lungs with coughing and/ or wheezing.

TREATS

Bronchial asthma. Common cold. Rheumatoid arthritis (inflammation intense but short lived). Rhinitis. Acute glomerulonephritis. Infantile enuresis. Painful menstruation. Abdominal masses. Pharyngitis. Early stages of mastitis. Lumbar strain. Periarthritis of the shoulder. Raynaud's disease. Trigeminal neuralgia. Sinusitis. Asthma. Chronic obstructive pulmonary disease (COPD). Pericardial effusions. Urticaria. Nephritis. Benign prostatic hypertrophy (BPH). Phlebitis. Peripheral neuropathy. Fever. Edema. Dyspnea. Acute nephritis. Upper respiratory tract infection. Influenza. Acute bronchitis. Chronic bronchitis. Lobar pneumonia. Allergies. Sinusitis. Wind-Cold nosebleeds. Difficult labor. Pelvic inflammatory disease. Otitis media. Traumatic arthropathy. Cervical spine disease. Ankylosing spondylitis. Sciatica. Migraine. Scleroderma. Hay fever. Eczema. Chilblains. Pyelonephritis. Ascites. Solar dermatitis. Enuresis. Painful obstruction. Gasping. Arthralgia. Unilateral pain.

* MA XING YI GAN TANG - 麻杏苡甘湯 - Ephedra, Apricot Kernel, Coicis and Licorice Formula

ACTIONS - Releases the Exterior. Dispels Wind-Dampness. Resolves Phlegm.

SYNDROMES - Externally contracted Wind-Dampness.

CLINICAL MANIFESTATIONS - Mild generalized body aches. Slight aversion to Wind. Chronic respiratory complaints. Fever that worsens in the afternoon. Dry skin.

HERBS AND ACTIONS

-Ma Huang - Induces sweating, releases the exterior, disseminates and facilitates Lung Qi, calms wheezing, stops coughing, promotes urination and reduces edema. With Xing Ren, for Wind-Cold cough and wheezing.

-Xing Ren - Stops cough and calms wheezing.

-Yi Yi Ren - Promotes urination, leaches out Dampness, strengthens the Spleen and expels Wind-Dampness. With Ma Huang, Xing Ren and Gan Cao, for generalized body aches due to Wind-Dampness.

-Gan Cao - Moderates and harmonizes the properties of other herbs. With Ma Huang and Xing Ren, for coughing or wheezing due to Wind-Cold Attacking the Lungs.

TREATS

Rheumatic arthritis. Rheumatism. Neuralgia. Muscle pain. Keratosis palmaris. Keratosis plantaris. Warts. Eczema. Arthritis. Headache. Paralysis. Calluses. Corns. Sudamina. Frostbite. Dandruff. Asthma. Hemiplegia. Edema. Genital warts. Arthralgia. Painfull obstruction.

* WU TOU TANG - 烏頭湯 - Aconite Formula

ACTIONS - Disperses Cold. Reinforces Yang. Replenishes Qi and Blood. Stops pain. Warms the channels. Disperses Wind.

SYNDROMES - Wind-Cold-Damp Bi - Cold Predominant. Long-term Wind-Cold Dampness invades the channels. Cold Bi in patients with Qi Deficiency.

CLINICAL MANIFESTATIONS - Severe difficulty in flexion and extension. Severe pain. Cold hands and feet. Aversion to Cold. Fatigue. Loose Stools. Severe pain and coldness of muscles and joints. Severely restricted motion of joints. Cold extremities. Whole body pain, especially in the hands and feet. Anorexia. Heavy feeling in muscles. Catches cold easily. No thirst.

HERBS AND ACTIONS

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the Channels and stops pain. With Ma Huang and Bai Shao, for generalized joint pain with restrictions in range of motion.

-Ma Huang - Releases the exterior, induces sweating, promotes urination and disperses Cold. With Chuan Wu, for Wind-Cold Bi.

-Bai Shao - Alleviates pain and nourishes Blood. With Gan Cao, for muscle spasms especially in the calf, due to Blood Deficiency.

-Huang Qi - Strengthens the Spleen, tonifies Qi, tonifies Wei Qi, stabilizes the Exterior and nourishes Blood.

-Gan Cao - Tonifies the Spleen, tonifies Qi, alleviates pain and moderates and harmonizes the properties of the other herbs.

TREATS

Osteoarthritis. Panarthralgia. Painful obstruction. Scapulohumeral periarthritis. Neck pain and stiffness. Shoulder pain. Whole body pain. Leg Qi. Arthralgia. Carpal tunnel syndrome. Brachial plexus neuritis. Upper back pain. Low back pain. Hip pain.

* XIAO YAO SAN - 逍遥散 - Rambling Powder - Bupleurum And Tangkuei Formula. Relaxed Wanderer

ACTIONS - Pacifies the Liver. Spreads Liver Qi. Strengthens the Spleen. Nourishes the Blood. Harmonizes the Liver and Spleen.

SYNDROMES - Liver Qi Stagnation Invades Stomach. Liver Qi Stagnation Invades the Spleen (Liver and Spleen Disharmony). Liver Qi Stagnation with Blood Deficiency. Qi and Blood Stagnation. Blood Deficiency with fatigue. Disharmony between the Ying and Wei with Phlegm, cough, tidal fever and wasting of limbs which may lead to Bone Steaming. Gu Syndrome.

CLINICAL MANIFESTATIONS - Hypochondriac pain. Headache. Vertigo. Bitter taste in the mouth. Dizziness. Frequent sighing. Epigastric pain and distention. Flatulence. Dry mouth and throat. Fatigue. Anorexia. Alternating chills and fever. Irregular menstruation. Breast distention. Lassitude. Insomnia. Shoulder and back pain. Rib pain. Anxiety. Tightness or fullness in the chest. Cold extremities. Pain in the arms and legs. Heaviness of the head. Night sweats. Bloating and pain at the umbilicus and abdomen. Diarrhea alternating with constipation. Five sole heat. Palpitations. Malar flush. Depression. Irritability. Increased desire to sleep.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution during pregnancy. Use with caution for those with Qi Stagnation with underlying Liver and

Kidney Yin Deficiency.

HERBS AND ACTIONS

-Chai Hu - Relieves Liver Qi Stagnation, pacifies the Liver, relieves the Shao Yang and reduces fever. With Bo He, for depression, a stifling sensation in the chest and irregular menstruation due to Liver Blood Deficiency with Stagnation.

-Dang Gui - Nourishes the Blood, regulates menses and invigorates and harmonizes the Blood.
With Bai Shao, nourishes Blood and eases anxiety due to Liver Stagnation.

-Bai Shao - Calms Liver Yang, alleviates pain, nourishes Blood and regulates menstruation.
With Chai Hu, for flank pain due to Liver Qi Stagnation.

-Bai Zhu - Tonifies the Spleen and tonifies Qi. With Fu Ling, strengthens the Spleen and resolves Dampness.

-Fu Ling - Strengthens the Spleen and harmonizes the Middle Jiao.

-Gan Cao - Tonifies Spleen Qi, stops pain and harmonizes the other herbs. With Bai Shao, moderates spasmodic abdominal pain.

-Bo He - Relieves Liver Qi Stagnation, disperses stagnant Heat and enhances Chai Hu's ability to relieve the Liver. With Bai Shao and Chai Hu, for chest and flank distention due to Liver Qi Stagnation.

-Sheng Jiang - Harmonizes, prevents rebellious Qi and normalizes the flow of Qi at the center.

-Zhi Shi - Enhances Chai Hu's function of dispersing the Liver.

TREATS

Chronic hepatitis. Viral hepatitis. Depression. Hysteria. Pleurisy. Acute tonsillitis. Chronic tonsillitis. Chronic gastritis. Peptic ulcer. Anemia. Functional uterine bleeding. Menopausal syndrome. Pelvic inflammatory disease. Fibrocystic breasts. Neurasthenia. Optic nerve atrophy. Central retinitis. Glaucoma. Acute retrobulbar neuritis. Stress. Meniere's disease. Candidiasis. Chronic Fatigue Immune Deficiency Syndrome (CFIDS). Cortical blindness. Prostatitis. Acid reflux. Breast lumps. Mastitis. Breast cancer. Gastralgia. Enteritis. Stomach cancer. Hypoglycemia. Chronic bronchitis. Chronic cough. Vomiting. Fever. Constipation. Anxiety neurosis. Tinnitus. Deafness. Anorexia. Bi-Polar disorder. Fatigue. Hyperlipoproteinemia. Edema during pregnancy. Hernia. Colitis. Hiccup. Morning sickness. Paralysis. Liver cancer. Shoulder pain. Low back pain. Fetal restlessness. Neck pain and stiffness. Irregular menstruation.

Temporomandibular joint syndrome (TMJ). Ulcerative colitis. Sore throat. Stress incontinence. Irritability. Nervousness in women. Affective psychosis. Vaginal discharge. Delayed menstruation. Irregular menstruation. Insomnia. Breast distention. Epstein Barr. Premenstrual syndrome (from ovulation to 1st day). Premenstrual syndrome with breast distention. Hyperthyroidism. Hepatitis C. Leaky gut syndrome. Giardiasis. Tuberculosis. Late menstruation. Scanty menstruation. Dysmenorrhea. Perimenopause syndrome. Premenstrual tension. Breast tenderness. Headache. Infertility. Irritable bowel syndrome. Dysentery. Vertigo. Dizziness. Polyuria. AIDS/HIV. Pertussis. Asthma. Nausea. Gu syndrome. Systemic lupus erythematosis. Anxiety. Hysteria. Schizophrenia. Stress-related breathing problems. Impotence. Hypertension. Palpitations. Abdominal pain. Abdominal pain during pregnancy. Dysphagia. Hoarseness. Migraine headache. Hiatus hernia. Obesity. Indigestion. Piriformis syndrome. Post-concussion syndrome. Upper and middle back pain. Early menstruation. Amenorrhea. Cervical cancer. Cirrhosis of the Liver.

* ZI YUN GAO - 紫雲膏 - Lithospermum Formula

ACTIONS - Clears Heat. Cools the Blood. Invigorates Blood circulation. Relieves Fire toxins. Clears Damp-Heat from the skin. Reduces swelling. Expels pus. Generates flesh A. Alleviates pain. Inhibits the growth of cancer cells.

SYNDROMES - Toxic Heat of the skin.

CLINICAL MANIFESTATIONS - Dry skin. Wrinkles. Ulceration of the skin. Skin abnormalities.

HERBS AND ACTIONS

-Zi Cao - Clears Heat, cools the Blood, invigorates Blood circulation, relieves Fire toxins, clears Damp-Heat from the skin and inhibits the growth of cancer cells.

-Dang Gui - Reduces swelling, expels pus, generates flesh and alleviates pain

-Ma You - .Moistens Dryness. Promotes bowel movement. Neutralizes toxins.

TREATS

Eczema. Tinea. Calluses. Corns. Acne. Frostbite. Prickly Heat. Body odor. Alopecia. Traumatic injury. Burns. Hemorrhoids. Rectal prolapse. Ulerations. Radiotherapy for breast cancer.

1.3.3.7 RT-TCM-07

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_07

Ban Xia Bai Zhu Tian Ma Tang, Chai Hu Shu Gan Tang, Fu Fang Zhen Zhu Tiao Zhi, Ge Gen Jia Ban Xia Tang, Huang Qin Tang, Ji Ming San, Jiao Tai Wan, Jin Gui Shen Qi Wan, Shao Yao Tang

Recordings Updated in May 2025

* BAN XIA BAI ZHU TIAN MA TANG - 半夏白朮天麻湯 - Pinellia, Atractylodes Macrocephalae And Gastrodia Formula

ACTIONS - Strengthens the Spleen. Dispels Dampness. Transforms Phlegm. Soothes the Liver. Extinguishes Wind.

SYNDROMES - Wind-Phlegm (Feng Tan). Shi Tan (Damp-Phlegm).

CLINICAL MANIFESTATIONS - Dizziness. Vertigo (possibly severe). Headaches (may be recurrent). A stifling sensation in the chest. Nausea. Vomiting. Copious sputum. Spots before the eyes. Heaviness of the head. Lockjaw. Sinus congestion. Cold feet. Fatigue. Abdominal distention. Weakness of hands and feet. May be edema. Sudden loss of consciousness. Excess salivation. Compulsive sleeping after eating.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with vertigo not caused by Wind-Phlegm, e.g. Liver Yang Rising or Blood Deficiency. Contraindicated for those with Kidney and Liver Yin Deficiencies.

HERBS AND ACTIONS

-Ban Xia - Transforms Phlegm, dries Dampness, descends Rebellious Qi and treats nausea and vomiting. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools. With Tian Ma, Bai Zhu and Fu Ling, for Phlegm-Dampness rising upward and combining with uprising Internal Wind with symptoms of headache, dizziness, focal distention, a stifling sensation in the chest and diaphragm, a greasy white tongue and wiry and slippery pulse.

-Tian Ma - Extinguishes Wind, subdues Rising Liver Yang, alleviates pain, disperses Wind-Damp Bi and effectively treats headache, dizziness and vertigo. With Ban Xia, Bai Zhu and Chen Pi, for headaches and dizziness from Wind-Phlegm. With Ban Xia, Bai Zhu and Fu Ling, for a heavy feeling and a congested headache.

-Bai Zhu - Strengthens the Spleen, dries Dampness and reinforces Ban Xia and Tian Ma in treating Phlegm. With Tian Ma and Fu Ling, for Phlegm due to Spleen Dampness with Internal Liver Wind. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiencies. With Ban Xia, Tian Ma, Fu Ling and Chen Pi, for dizziness and vertigo due to accumulation of Phlegm and Liver Wind.

-Chen Pi - Regulates Qi and transforms Phlegm. With Sheng Jiang, for vomiting and hiccups due to Disharmony of the Stomach Qi and Cold-Dampness Obstructing the Middle with nausea and hiccup. With Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Bai Zhu, for anorexia and other symptoms of Damp-Obstruction due to Spleen Deficiency. With Ban Xia and Fu Ling, for cough due to accumulation of Dampness and Phlegm.

-Fu Ling - Leaches out Dampness, strengthens the Spleen and assists in Transforming Phlegm. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention and anorexia due to congested fluids. With Ban Xia, Chen Pi and Sheng Jiang, for congested fluids in the Stomach causing nausea and vomiting. With Bai Zhu and Tian Ma, for Phlegm accumulation with vertigo.

-Gan Cao - Tonifies the Spleen and augments Qi, resolves Phlegm, and moderates and harmonizes the harsh properties of other herbs.

-Sheng Jiang - Warms the Middle, stops vomiting, warms the Lungs, stops cough and reduces the toxicity of other herbs. With Da Zao, harmonizes the Spleen and Stomach. With Ban Xia, for vomiting due to many causes including Stomach Cold and productive cough due to Phlegm-Dampness.

-Da Zao - Tonifies the Spleen and Stomach and augments Qi and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, prevents Phlegm accumulation.

TREATS

Meniere's disease. Hypertension due to gastrointestinal weakness. Tubercular meningitis. Benign positional vertigo. Neurotic vertigo. Recurrent headaches. Tension headache. Gastroatonia. Facial paralysis. Epilepsy. Aural vertigo. Chronic gastroenteritis. Cerebrovascular accident. Alzheimer's disease. Asthma. Numbness. Periarthritis of the shoulder. Abdominal fullness and distention. Otitis media. Fatigue. Hiccups. Palpitations. Aphasia. Seizures and epilepsy during pregnancy. Painful obstruction. Ear pain. Arteriosclerosis. Compulsive sleeping after eating. Weakness of the hands and feet. Headache and vertigo due to hypotension. Gastroptosis. Sinusitis. Water poisoning. Migraine. Cerebellitis. Stroke. Food allergy. Cerebral arteriosclerosis. Vestibular neuritis. Dizziness. Vertigo. Paresthesia. Parkinson's disease. Nausea/Vomiting. Tinnitus. Otitis externa. Deafness. Edema. One-sided perspiration.

Irritability during pregnancy. Otorrhea. Unilateral pain. Sore throat.

* CHAI HU SHU GAN TANG - 柴胡疏肝汤 - Bupleurum FormulaTo Spread The Liver. Formula to Disperse Vital Energy in the Liver

ACTIONS - Spreads Liver Qi. Promotes Qi circulation. Harmonizes the Blood. Alleviates pain.

SYNDROMES - Liver Qi Stagnation. Liver Qi Stagnation: Liver Qi Invades the Stomach.

CLINICAL MANIFESTATIONS - Hypochondriac pain and distention. Alternating fever and chills. Depression. Easily angered. Chest fullness. Bitter taste in mouth. Fidgeting. Abdominal pain and cramps. Breast distention and pain. Irritability. Dysmenorrhea. Irregular menstruation. Amenorrhea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not use without modification for those with Yin Deficient Heat.

HERBS AND ACTIONS

-Chen Pi - Regulates Qi, adjusts the middle, improves the transportive function of the Spleen, relieves the diaphragm and descends Qi.

-Chai Hu - Resolves Shao Yang, spreads Liver Qi and relieves Stagnation. With Bai Shao, for vertigo, dizziness, rib pain and menstrual irregularity due to Liver Qi Stagnation. With Xiang Fu and Bai Shao, for pain and distention in the chest and flanks.

-Chuan Xiong - Invigorates Blood, promotes Qi movement, moves Qi upward and alleviates headache pain. With Xiang Fu, for Qi Stagnation combined with Blood Stasis.

-Zhi Ke - Moves Qi, disperses Heat and reduces distention and pressure.

-Bai Shao - Nourishes the Blood, regulates menses, sedates Liver Yang, alleviates pain, preserves the Yin and adjusts the Ying and Wei. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach.

-Gan Cao - Tonifies the Spleen, augments Qi and harmonizes.

-Xiang Fu - Regulates Liver Qi, regulates menstruation, alleviates pain and relieves depression. With Chai Hu, for Qi Stagnation and menstrual irregularity.

TREATS

Hypertension. Dysmenorrhea. Gastralgia. Mania. Cholecystitis. Breast hyperplasia. Chronic hepatitis. Viral hepatitis. Atrophic gastritis. Insomnia. Depression. Orchitis. Late

menstruation. Infertility. Acid reflux. Breast tenderness. Coronary Heart disease. Dysentery. Abdominal pain. Stomach cancer. Bi-polar disorder. Pertussis. Chronic cough. Alternating chills and fever. Schizophrenia. Stress. Abdominal fullness and distention. Diverticulitis. Amenorrhea. Tension headache. Hiatus hernia. Herpes zoster. Interstitial cystitis. Morning sickness. Liver cancer. Gastroptosis. Raynaud's disease. Breast distention. Chronic gastritis. Premenstrual syndrome. Premenstrual breast distention. Gastritis. Irregular menstruation. Fibrocystic breast disease. Pleurisy. Mastitis. Cholelithiasis. Peptic ulcer. Emotional stress. Male sexual dysfunction. Prostatic hypertrophy. Obesity. Tourette syndrome. Hyperthyroidism. Breast cancer. Irritable bowel syndrome. Hiccups. Trigeminal neuralgia. Chronic bronchitis. Chronic tonsillitis. Constipation. Lupus erythematosus. Neurosis. Chronic pancreatitis. Hemafecia. Intestinal abscess. Enuresis. Hernia. Colitis. Impotence. Low back pain. Gastroenteritis. Ascites. Indigestion. Neck and shoulder stiffness. Stress incontinence. Cirrhosis of the Liver.

* FU FANG ZHEN ZHU TIAO ZHI (FTZ) Formula

Fu Fang Zhen Zhu Tiao Zhi formula (FTZ) is a patented Chinese medicinal decoction used to relieve hyperlipidemia, atherosclerosis and other symptoms associated with metabolic disorders in clinics. FTZ has significant curative effect for hyperglycemia and hyperlipidemia. Because of the complexity of the chemical constituents of Chinese herbal formulas, the holistic pharmacological mechanism of FTZ acting on type 2 diabetes mellitus (T2DM) and nonalcoholic fatty liver disease (NAFLD) remains unclear. Herbs - Nu Zhen Zi. Bai Zhu. Dan Shen. Huang Lian. San Qi. Du Zhong. Da Ji. Fo Shou.

* GE GEN JIA BAN XIA TANG - 葛根加半夏汤 - Kudzu Formula Plus Pinellia

ACTIONS - Releases Wind-Cold in the Exterior and muscle layer. Generates Fluids. Relieves muscle-ache of the neck. Stops vomiting.

SYNDROMES - Simultaneous Tai Yang - Yang Ming stage. Tai Yang stage with vomiting but no diarrhea.

CLINICAL MANIFESTATIONS - Chills and fever. Anhidrosis. Stiff and rigid neck, shoulders and upper back. Intolerance of Wind. Dislike of Cold. Inflammation. Vomiting. Muscle spasms. Mucosal swelling. Nasal congestion. Sensitivity to dust. Headache. Wind-Cold Bi (few joints affected, intense but short lived, changes over days or weeks). Inflammation.

HERBS AND ACTIONS

-Ge Gen - Releases the exterior, and releases the muscle layer (especially of the upper back and neck) by bringing fluids to the area. With Ma Huang, Gui Zhi and Bai Shao, for

Wind-Cold with stiffness and tension in the upper back and neck.

-Ma Huang - Strongly releases the exterior, disperses Cold, moves Lung Qi and stops wheezing. With Gui Zhi for Wind-Cold excess conditions with fever and chills but no sweat and Wind-Cold-Damp Bi.

-Gui Zhi - Releases the Exterior, warms the channels and collaterals to relieve pain, warms and facilitates the flow of Yang Qi in the chest, warms and facilitates the flow of Blood through the vessels and releases the muscle layer. With Ge Gen, releases the exterior and relieves the muscle layer. With Bai Shao, warms and tonifies the Middle Jiao for External Wind-Cold with disharmony between the Ying and Wei, with spontaneous sweating, fever and chills.

-Bai Shao - Adjusts the Ying and Wei, preserves Yin by preventing excessive diaphoresis. With Gan Cao, relieves muscle spasms and therefore helps relieve neck and back stiffness. With Gui Zhi, Sheng Jiang and Gan Cao, for Wind-Cold with Deficiency and perspiration.

-Sheng Jiang - Releases the Exterior, disperses Cold, warms the Middle, stops vomiting, stops cough and reduces the toxicity of other herbs. With Ban Xia, for vomiting due to many causes including Stomach Cold. With Gui Zhi, warms and dispels thin mucus in the Stomach with nausea, hiccup, Stomach pain, acid reflux or vomiting of clear fluid. With Ma Huang, strongly creates sweating to treat all externally contracted Wind-Cold disorders, especially those in which Wind-Cold has constrained Lung Qi with cough and wheezing and the failure of Lung Qi to descend causing nausea and vomiting.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, protects the Ying and harmonizes and protects the Stomach.

-Gan Cao - Moderates and harmonizes the properties of other herbs.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, harmonizes the Stomach. and stops vomiting.

TREATS

Common cold. Upper respiratory tract infection. Influenza. Stomach flu. Acute cervical myositis. Stiff shoulders. Tendinitis of shoulder. Bursitis of shoulder. Urticaria. Allergic rhinitis. Early-stage poliomyelitis. Early-stage encephalitis. Chronic pediatric diarrhea. Stiff neck. Frozen shoulder. Pneumonia. Bronchitis. "40 years wrists". "50 years shoulders". Neuralgia. Gastritis. Painfull obstruction. Nausea/Vomiting. Eczema. Rubella. Furuncles. Boils. Keratitis. Hordeolum. Conjunctivitis. Trachoma. Otitis media. Stuffy nose. Otitis externa. Meningitis. Lymphadenitis. Mastitis. Scarlet fever. Tonsillitis. Arthritis. Lumbago. Fever. Stiff upper back.

* HUANG QIN TANG - 黄芩湯 - Scutellaria Formula. Scute and Licorice Combination

ACTIONS - Clears Heat. Alleviates dysenteric disorders. Stops diarrhea. Harmonizes the Middle Jiao. Stops pain.

SYNDROMES - Damp-Heat Dysentery.

CLINICAL MANIFESTATIONS - Fever. A bitter taste in the mouth. Abdominal pain. Diarrhea. Headache. Dysentery. Abdominal spasms.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with initial stages of diarrhea or dysentery with pronounced Exterior symptoms. Contraindicated for those with dysentery due to Cold, Dampness or Deficiency. Avoid foods that are spicy, oily or greasy while using this formula.

HERBS AND ACTIONS

-Huang Qin - Clears Heat and dries Dampness.

-Bai Shao - Astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach and epigastric, hypochondriac or flank pain. With Huang Qin, for dysenteric disorders with abdominal pain due to Heat entering the Interior.

-Gan Cao - Moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Bai Shao and Huang Qin, for abdominal pain and dysenteric diarrhea from Damp-Heat.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi and moderates and harmonizes the harsh properties of other herbs.

TREATS

Amoebic and bacillary dysentery. Acute colitis. Pelvic inflammatory disease. Indigestion. Appendicitis. Bleeding due to menoplania. Abdominal pain. Spontaneous perspiration. Acute enteritis. Tenesmus. Diarrhea. Common Cold. Adnexitis. Fever. Abdominal spasms.

* JI MING SAN - 鸡鸣散 - Formula To Use At Cockscrow

ACTIONS - Promotes the movement of Qi. Descends turbidity. Disseminates Cold. Transforms Dampness.

SYNDROMES - "Leg Qi" due to Cold Dampness in the legs and feet. "Leg Qi" due to

Wind-Dampness.

CLINICAL MANIFESTATIONS - Swelling of the feet and calves. Heavy, weak feet and calves. Difficulty walking. Numbness, cold and/or pain in the the feet and calves. Spasms and up-rushing that reaches the chest (running piglet). Aversion to Cold. Severe: A stifling sensation in the chest. An overwhelming sense of nausea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not use for "leg Qi" due to Dryness or Damp-Heat without significant modification. Contraindicated during pregnancy.

NOTES - This formula is most effective when used early in the morning.

HERBS AND ACTIONS

-Bing Lang - Regulates Qi, reduces accumulations, drains downward, unblocks the bowels, promotes urination and relieves nausea.

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation, unblocks the channels, harmonizes the Stomach, nourishes the Liver and transforms Dampness. With Wu Zhu Yu and Bing Lang, for Damp-Cold abdominal pain and diarrhea. With Wu Zhu Yu, disperses Cold, transforms Dampness, invigorates the channels and alleviates pain to treat the pain of "leg Qi" due to Cold-Dampness in the Lower Jiao preventing the smooth flow of Qi and Blood and "Leg Qi" entering the abdomen leading to intolerable stifling encumbrance with abdominal distention and fullness. With Wu Zhu Yu, Bing Lang and Zi Su ye, for "leg Qi" with swelling and pain in the lower extremities.

-Wu Zhu Yu - Warms the Middle Jiao, disperses Cold, promotes the movement of Qi, relieves Stagnation in the Liver channel, alleviates pain, descends rebellious Qi, stops vomiting, warms the Spleen, stops diarrhea and expels Damp-Cold. With Mu Gua and Bing Lang, for Damp-Cold Leg Qi. With Shen Jiang, for vertex migraine headaches.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and descends Qi.

-Zi Su Ye - Releases the Exterior, disperses Cold, promotes the movement of Spleen and Stomach Qi, harmonizes the Middle Jiao, relieves intestinal gas, improves Lung function, expands the chest and relieves Cold induced wheezing. With Jie Geng, for common colds with nasal congestion and productive cough. With Sheng Jiang, for Wind-Cold with chills, fever, headache, nasal congestion and anhidrosis.

-Jie Geng - Opens the Lungs, spreads Lung Qi, expels Phlegm and opens and raises Lung Qi, directing the effects of other herbs to the upper body.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Middle, stops vomiting, warms the Lungs and stops coughing. With Chen Pi, for Cold-

Dampness Obstructing the Middle with nausea and hiccup.

TREATS

Beriberi. Filariasis. Edema. Restless leg syndrome.

* JIAO TAI WAN - 交泰丸 - Grand Communication Formula

ACTIONS - Re-establishes communication between the Heart and Kidneys.

SYNDROMES - Heart and Kidney Deficiency (Disharmony Between the Heart and Kidneys).

CLINICAL MANIFESTATIONS - Irritability. Restlessness. Severe, continuous palpitations. Nocturnal emissions (especially with sexual dreams). Night sweats. Coolness of the lower limbs. Great difficulty falling asleep.

HERBS AND ACTIONS

-Huang Lian - Drains Fire, relieves toxicity, drains Dampness and clears Heart Fire. With Rou Gui, for insomnia with disturbing dreams, palpitations which are worse at night and irritability due to lack of communication between the Heart and Kidneys.

-Rou Gui - Warms the Kidneys, Spleen and Heart and strengthens the Yang and Ming Men Fire Disperses deep Cold, warms the channels, unblocks the channels and vessels and alleviates pain. With Huang Lian, for irritability, restlessness, coolness of the lower limbs and difficulty falling asleep due to Disharmony between the Heart and Kidneys.

TREATS

Insomnia. Palpitations. Dizziness. Anemia. Tinnitus. Low back pain. Congestive Heart failure. Nocturnal emissions. Spermatorrhea. Amenorrhea. Senility. Constipation. Neurosis. Forgetfulness. Night sweats.

* JIN GUI SHEN QI WAN - 金匱腎氣丸 - Kidney Qi Formula From The Golden Cabinet. Formula for Restoring the Vital Energy and Function of the Kidney

ACTIONS - Warms and Tonifies Kidney Yang.

SYNDROMES - Kidney Yang Deficiency. Leg Qi. Tan Yin. Xiao Ke. Jin Ye Stasis. Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency.

CLINICAL MANIFESTATIONS - Aversion to Cold. Watery stools with undigested food. Lower back pain. Weakness of the lower extremities. A cold sensation in the lower half

of the body. Tenseness in the lower abdomen. Pain and cramps in the lower abdomen. Panting and irritability to the point of having difficulty lying down. Will breathe most comfortably while leaning against something. Nocturia. May be numbness in the lower abdomen. Urinary difficulty with edema or Spasmodic pain in the lower abdomen. Excessive urination. If severe, may be incontinence of urine. May have persistent diarrhea. Dizziness. Vertigo. Dysuria. May have flushed face (Yang floating upward). Thirst with frequent, copious urination (Xiao Ke). Fatigue (severe). May have severe perspiration (Yang floating upward). Constipation. Lassitude. Pale face. Edema of the face and feet. Severe edema of the legs (may prevent walking). Maybe cough. Maybe asthma.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency with dry mouth and throat and a red tongue with no coat. Use with caution for those with gastrointestinal weakness. Contraindicated for those with marked ascites. Contraindicated for those with frequent diarrhea. Contraindicated for those with facial flushing with fever. Contraindicated during pregnancy. This formula may be effective in treating side effects and adverse reactions, including dizziness, weight gain, perspiration and emotional disturbances associated with long-term prednisone use.

NOTES - Jin Gui Shen Qi Wan uses Ram. Cinnamomi Gui Zhi. Ba Wei Di Huang Wan uses Cx Cinnamomi Rou Gui.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Yin and Blood and tonifies the Kidneys. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Rou Gui, for Kidney Yang Deficiency.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops Excess perspiration. With Shan Yao, tonifies the Liver and benefits the Spleen.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Zi - Tonifies the Ming Men, dispels Cold, eliminates Dampness and tonifies Kidney Yang. With Gui Zhi, assists Yang and enhances water metabolism. With Shu Di Huang and Rou Gui, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and sore back and legs, impotence, and urinary frequency.

-Gui Zhi - Warms and tonifies Kidney Yang and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Mu Dan Pi, helps move Blood to facilitate the flow to the Kidneys. With Fu Zi, for chills, backache and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu

Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination, strengthens the Spleen and drains Dampness, enabling Gui Zhi to warm the Bladder.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Gui Zhi, warms and transforms the Fluids, unblocks Yang and promotes urination.

-Mu Dan Pi - Clears Heat and Deficiency Fire, cools and harmonizes the Blood, invigorates the Blood and dispels Blood Stasis.

TREATS

Chronic glomerulonephritis. Chronic interstitial nephritis. Chronic diffuse nephritis. Chronic urethritis. Diabetes mellitus. Diabetes insipidus. Primary hyperaldosteronism. Hypothyroidism. Neurasthenia. Arthritis. Beriberi. Chronic bronchial asthma. Chronic bronchitis. COPD. Urinary retention. Climacteric syndrome. Epstein Barr Virus. Chronic Functional Immuno-Deficiency Syndrome (CFIDS). Spermatorrhea. Pyelitis. Pyelonephritis. Albuminuria. Prostate cancer. Addison’s Disease. Cystitis. Neuralgia. Postpartum dysuria. Nephroatrophy. Urinary incontinence. Cataract. Keratosis. Keratitis. Numbness of the legs. Infertility. Benign prostatic hypertrophy. Postpartum urinary retention. Vitreous opacity. Meniere’s disease. Neurogenic tinnitus. Periodontal disease. Dysmenorrhea. Gynecomastia. Vesicle calculus. Anuria. Nocturia. Coronary artery disease. Lumbago. Irregular menstruation. Metrorrhagia. Panarthralgia. Nephrotic syndrome. Hyperglycemia. Alopecia. Proteinuria. Arteriosclerosis. Dysentery. Dizziness. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Polyuria. Hematuria. Hay fever. Addison’s disease. Constipation. Dermatitis. Somnolence. Tinnitus. Low back pain. Anorexia. Fatigue. Facial and ankle edema. Nausea/Vomiting. Epistaxis. Oral leukoplakia. Dyspnea. Gingivitis. Dysuria during pregnancy. Rheumatoid arthritis. Sjogren's syndrome. Prematurely gray hair. Vaginal discharge. Macular degeneration. Emphysema. Asthma. Bronchitis. Chronic rhinitis. Chronic tonsillitis. Post-surgical urinary incontinence. Urinary retention from spinal cord injuries. Renal tuberculosis. Perimenopausal syndrome. Leg Qi. Menopause syndrome. Nephrosclerosis. Nephrotuberculosis. Cystolithiasis. Cystic tuberculosis. Senile cystoatrophy. Prostamegaly. Cerebral hemorrhage. Arteriosclerosis. Hypotension. Forgetfulness. Hypertension. Nephrolithiasis. Urolithiasis. Impotence. Amenorrhea. Inappropriate erection. Premature ejaculation. Sciatica. Deformed vertebrae. Glaucoma. Eczema. Tinea. Senile itching. Urticaria. Thirst. Rectoptosis. Fever in the head and extremities. Chronic gonorrhea. Poor vision. Senile dementia. Vegetative nerve disturbance. Paralysis of the detrusor muscle. Recurrent aphthous ulcers. Proteinuria. Endocrine disorders. Arteriostenosis. Prostatitis. Scanty menstruation. Obesity. Premenstrual syndrome. Hashimoto's thyroiditis. Stroke. Headache. Hyperaldosteronism. Optic atrophy. Vertigo. Atrophy (Wei) Syndrome. Spontaneous perspiration. Hysterical paralysis. Periodic paralysis. Facial paralysis. Acute infectious multiple neuritis. Stomach cancer. Oliguria with edema. Chronic renal failure. AIDS/HIV. Cor pulmonare. Amyotrophic lateral sclerosis (ALS). Narcolepsy.

Diarrhea. Knee pain. Chronic pancreatitis. Weakness. Yawning. Chronic enteritis. Enuresis. Palpitations. Rectal prolapse. Metrorrhagia. Periodontitis. Edema during pregnancy. Upper back pain. Neck pain and stiffness. Systemic lupus erythematosus. Vaginitis. Sore throat.

* SHAO YAO TANG - 芍藥湯 - Peony Combination

ACTIONS - Regulates and Harmonizes Qi and Blood. Clears Heat. Dries Dampness. Relieves toxicity. Relieves pain.

SYNDROMES - Damp-Heat In Colon (Dysentery). Gu Syndrome.

CLINICAL MANIFESTATIONS - Abdominal pain. Tenesmus. Difficulty with defecation. Diarrhea with pus and blood (equal amounts). Purulent stools. Maybe borborygmus. Burning sensation around the anus. Dark, scanty urine. Oliguria with reddish urine.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with chronic dysenteric disorders from Deficiency Cold. Contraindicated for those with External/Biao conditions.

HERBS AND ACTIONS

-Bai Shao - Nourishes Blood, regulates menstruation, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind, softens the Liver and alleviates pain. With Gan Cao regulates the relationship between the Liver and Spleen and nourishes sinews, for abdominal pain due to disharmony between the Liver and Stomach, epigastric, hypochondriac or flank pain and muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency. With Huang Qin, for dysenteric disorders with abdominal pain due to Heat entering the Interior. With Huang Qin and Huang Lian, for Damp-Heat dysenteric disorders. With Dang Gui, nourishes Yin and Blood.

-Huang Qin - Clears Heat toxin from the Intestines, dries Dampness, drains Fire, detoxifies and calms ascending Liver Yang. With Bai Shao, for Damp-Heat dysentery with fever and tenesmus. With Huang Lian, drains pathogenic Heat from the upper and middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease, toothache and explosive diarrhea and dysentery with burning pain in the anus or fitted, filthy stools and abdominal pain. With Da Huang, for constipation.

-Dang Gui - Nourishes and invigorates Blood, moistens the Intestines, unblocks the bowels and alleviates pain. With Bai Shao, regulates and harmonizes Qi and Blood for Blood Deficiency Heat. With Gan Cao, moderates spasms and relieves abdominal pain.

-Bing Lang - Moves Qi, eliminates stasis, drains and unblocks bowels, promotes urination and stops nausea. With Bai Shao, Mu Xiang and Huang Lian, for Damp-Heat

dysenteric disorders with tenesmus.

-Huang Lian - Resolves toxic Heat in the Intestines, drains Stomach Fire and dries Dampness. With Huang Qin, clears and drains and assists Da Huang in clearing Heat through the stool. With Huang Qin and Da Huang, for hematemesis and rectal bleeding due to Blood Heat. With Mu Xiang, for Heat type dysentery. With Rou Gui, for insomnia with disturbing dreams, palpitations which are worse at night and irritability due to lack of communication between the Heart and Kidneys. With Mu Xiang and Bing Lang, for hot dysenteric disorders with Qi Stagnation and Damp-Heat in the Middle Jiao with intense tenesmus.

-Da Huang - Drains Heat through the stool, drains Fire, drains Heat from the Blood, invigorates the Blood and dispels Blood Stasis and reduces Fire toxicity. With Huang Lian, for fullness and distention due to Heat accumulation. With Huang Lian and Huang Qin, for hematemesis, or epistaxis due to Blood Heat and whole body Damp-Heat. With Dang Gui, for Blood Stasis. With Rou Gui, for chronic constipation.

-Mu Xiang - Moves Qi, eliminates stasis, adjusts and regulates stagnant Qi in the Intestines, dispels Damp-Heat and harmonizes the Liver and Spleen. With Bing Lang, for Qi Stagnation in the Stomach and Intestines due to Food Stagnation with abdominal distention, and fullness and distention, anorexia, aversion to the smell of food, nausea without the ability to vomit and an uncomfortable urge to defecate which is often unsuccessful and relieves tenesmus and the passage of mucus in dysenteric disorders. With Bing Lang and Da Huang, for epigastric and abdominal fullness, distention, and pain with constipation, or red and white dysenteric diarrhea due to Stagnation in the Stomach and Intestines transforming into Damp-Heat. With Huang Lian, for dysentery and diarrhea, with tenesmus and abdominal distention and pain. With Bai Shao, for diarrhea with profuse pus and Blood.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Bai Shao and Huang Qin, for abdominal pain and dysenteric diarrhea from Damp-Heat. With Bai Shao, Huang Qin, Huang Lian, Da Huang and Bing Lang, for diarrhea, dysentery, and abdominal pain caused by Damp-Heat.

-Rou Gui - Assists the generation and circulation of Qi and Blood and prevents the Cold, bitter properties of the other herbs from injuring the Yang. With Da Huang, invigorates the Blood. With Huang Lian, for irritability, restlessness, coolness of the lower limbs and difficulty falling asleep due to Disharmony between the Heart and Kidneys and chronic dysentery.

TREATS

Candidiasis. Giardiasis. Dysentery. Acute enteritis. Acute colitis. Gastralgia. Oliguria. Nausea/Vomiting. Diarrhea. Diverticulitis. Crohn's disease. Anorexia. Diverticulitis. Gastroenteritis. Urinary tract infection. Ulcerative colitis. Allergic colitis. Leaky gut

syndrome. Chronic fatigue syndrome. Irritable bowel syndrome. Abdominal pain. Hematuria. Gu syndrome. Diverticulosis. Intestinal polyps. Colon cancer. Hemafecia. Fatigue. Profuse perspiration.

1.3.3.8 RT-TCM-08

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_08

Bu Zhong Yi Qi Tang, Cang Er Zi San, Chai Hu Gui Zhi Tang, Er Xian Tang, Jia Wei Xiao Yao San, Liu Wei Di Huang Wan, Xiang Sha Liu Jun Zi Tang, Yin Qiao San, Yu Ping Feng San

Recordings Updated in May 2025

* BU ZHONG YI QI TANG - 补中益气汤 - Tonify The Middle And Augment The Qi Formula - Ginseng And Astragalus Combination. Formula for Reinforcing the Center and Replenishing Qi. Interior Nourishing and Qi Increasing Formula. Middle-Reinforcing and Qi-Benefiting Formula

ACTIONS - Tonifies Middle Jiao Qi. Benefits Qi. Regulates Qi. Raises Sunken Yang. Lifts prolapsed organs.

SYNDROMES - Central Qi Sinking. Spleen Not Governing Blood. Spleen and Lung Qi Deficiency: Yin Fire due to Spleen and Lung Qi Deficiency. Gu Syndrome. Atrophy disorder (Wei Syndrome) due to Spleen and Stomach Qi Deficiency.

CLINICAL MANIFESTATIONS - Aversion to Cold. Bleeding. Borborygmus. Bloating. Catches cold easily. Chronic low grade fever. Clouded vision. Cold extremities. Constipation. Deafness. Depression. Desire for warm beverages. Diarrhea or dysentery, may be chronic. Dizziness. Drooping upper eyelids. Dry itching nose. Dry lungs. Dyspnea. Dysuria. Edema with prolapse. Enuresis. Epilepsy. Eye fatigue after extended use. Eye sores. Fatigue. Fecal incontinence. Fever without Cold which alternates between low and high. Fever with vexation. Frequent bowel movements. Frequent urination. Fever or Heat in the flesh in cool or cold weather. Genital sores. Goiter. Headache. Hemafecia. Hematemesis. Hematuria. Hemorrhoids. Hiccup. Hoarseness. Incessant thirst. Intermittent dull abdominal pain, better with warmth and pressure. Intermittent fever (worse on exertion). Laconic speech. Leukorrhea. Limbs may become emaciated. Lingering, dull tooth pain. Loose and watery stools or diarrhea. Loss of

voice. Maybe chronic weak cough. Maybe cloudy urine. Maybe cold body. Maybe cough. Maybe low back pain due to Dampness. Maybe scabs on the nasal mucosa. Menstrual flooding or spotting. Narrow visual field. Nasal congestion. Nausea and vomiting. Night blindness. Night sweats. Obstinate sores on the tongue with the opening of the sore falling downward. Obstructed urination. Oral sores. Painful urination. Pale complexion. Premature ejaculation. Prolapse of any organ. Prolonged runny nose may be malodorous. Protracted, soft, tender, numb tongue. Runny nose with clear, watery discharge may be precipitated by Cold or allergen. Sagging and distention of the lower abdomen. Sallow complexion. Seizures. Sensitivity of back to Cold and Wind. Shiny, pale complexion. Shortness of breath. Slight thirst with desire for warm drinks. Soft voice. Somnolence. Spontaneous perspiration. Suppuration. Susceptibility to Wind and Cold. Tendency to curl up. Terminal dribbling. Thirst with a desire for warm drinks. Tidal fever which is worse on exertion. Tinnitus. Urinary obstruction. Urinary incontinence. Vaginal itching. Vertigo. Visual disturbances. Warmness of the body. Waxy, pale complexion. Weak eyelids. Weakness of the extremities.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency or Interior Heat.

HERBS AND ACTIONS

-Huang Qi - Strongly tonifies Qi, strengthens the Spleen and raises Spleen Yang. With Ren Shen, for Qi Deficiency with general debility, anorexia and spontaneous perspiration. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools.

-Ren Shen - Strongly tonifies Qi, reinforces Yang and harmonizes the Middle Jiao. With Bai Zhu and Gan Cao, assists Huang Qi in strengthening Qi.

-Bai Zhu - Strengthens the Spleen and dries Dampness.

-Gan Cao - Tonifies the Spleen and harmonizes.

-Dang Gui - Tonifies the Qi of the Blood and invigorates and harmonizes the Blood. With Huang Qi, Ren Shen, Bai Zhu and Gan Cao, augments Qi by Invigorating Blood.

-Chen Pi - Regulates Qi, tonifies the Spleen, assists raising Qi, aids digestion of tonics and prevents bloating which may accompany Qi tonics.

-Sheng Ma - Raises Yang, raises sunken Qi and guides other herbs upwards. With Chai Hu and Huang Qi, raises Sunken Yang.

-Chai Hu - Raises Yang Qi and relieves Stagnation.

-Sheng Jiang - (Variation of the formula.) With Da Zao, harmonizes and protects the Spleen and Stomach.

-Da Zao - (Variation of the formula)

TREATS

Abdominal distention. Abdominal pain. Abdominal pain during pregnancy. Acid reflux. Acute infectious multiple neuritis. Aftermath of severe illness. AIDS/HIV. Allergic rhinitis. Alzheimer's disease. Anal pain. Allergic rhinitis due to Wei Qi Deficiency with Phlegm Damp. Amenorrhea. Anal prolapse. Anemia. Anorexia. Aphthous ulcers. Aplastic anemia. Arrhythmias. Asthma. Atrophy (Wei) Syndrome. Behcet's Syndrome. Benign Prostatic Hypertrophy. Bi Syndrome due to Qi and Blood Deficiency. Bladder cancer. Bladder prolapse. Bleeding hemorrhoids. Borborygmus. Breast discharge. Candidiasis. Cataract. Cerebral arterial sclerosis. Childhood eczema. Chronic bronchitis. Chronic diarrhea. Chronic dysentery. Chronic Fatigue Immune Deficiency Syndrome (CFIDS). Chronic gastritis. Chronic gastroenteritis. Chronic gonorrhea. Chronic hepatitis. Chronic laryngitis. Chronic nephritis. Chronic pharyngitis. Chronic weakness. Chyluria. Clouded vision. Colitis. Common cold. Complications from transurethral resection of the prostate. Constipation. Constipation with anal prolapse. Corneal ulcers. Cough. Crohn's disease. Deafness. Depression. Diarrhea. Diverticulitis. Dizziness. Drooping of upper eyelids. Dysentery. Dyspnea. Early menstruation. Eczema. Edema during pregnancy. Emaciation. Emaciation with ptosis or prolapse. Endometriosis. Enuresis. Ephidrosis. Epistaxis. Epstein Barr. Excessive lactation. Eye pain. Eyelid edema. Facial pain. Facial paralysis. Fatigue. Fecal incontinence. Fever. Fever of unknown origin. First or second degree uterine prolapse. Food allergies. Forgetfulness. Frequent urination during pregnancy. Functional Uterine Bleeding. Gastroptosis. Gastritis. Giardiasis. Gradual paralysis. Gu syndrome. Guillain-Barre disease. Hashimoto's thyroiditis. Hay fever. Headache. Hemafecia with relatively mild bleeding. Hematemesis. Hematuria. Hemorrhage. Hemorrhoids. Hepatocellular carcinoma. Hepatoma. Hernia. Hiatus hernia. Hiccups. Hoarseness. Hydrocele. Hypertension. Hypoglycemia. Hypomenorrhea. Hypotension. Hysterical paralysis. Immunity compromised. Impetigo. Impotence. Increases longevity. Infertility. Insufficient lactation. Interstitial cystitis. Irregular menstruation. Irritable bowel syndrome. Leaky gut syndrome. Lethargy. Leukemia. Leukopenia. Leukorrhea. Limb paresthesia. Lin Syndrome due to Qi Deficiency (Lao Lin). Lochiorrhea. Lochioschesis. Loss of voice. Low back pain. Low-grade fever after exertion. Lower limb pain. Male infertility. Meniere's Disease due to Qi and Blood Deficiency with Central Qi Sinking and Yang Deficiency. Menorrhagia. Metrorrhagia. Middle back pain. Monoplegia. Multiple sclerosis. Muscular dystrophy, progressive. Myasthenia gravis. Myelitis, acute (inflammation of the spinal cord). Narcolepsy. Nausea/Vomiting. Neck pain. Nephritis. Nephroptosis. Neurasthenia. Night blindness. Night sweats. Numbness. Obesity. Optic atrophy. Oral ulcers. Otitis media. Pain during copulation. Pain during defecation. Painful obstruction. Palpitations. Paralytic strabismus. Paresthesia. Periodic paralysis. Pernicious anemia. Persistent malaria. Polyneuritis. Polyuria. Polyuria during pregnancy. Postpartum anuria. Postpartum illnesses. Postpartum lochioschesis. Postpartum urinary disorder. Postpartum urinary incontinence. Postpartum uterine bleeding. Progressive myodystrophy. Prolonged menstruation. Prostate cancer. Prostatitis. Pulmonary

tuberculosis. Raynaud's disease. Rectal prolapse. Recurrent miscarriages. Retinitis pigmentosa. Rheumatic fever. Rhinitis. Sciatica. Seizures. Septicemia. Side effects of radiation treatments. Sinusitis. Somnolence. Spontaneous perspiration. Stomach cancer. Strangury. Stress incontinence. Summer weight loss. Tenesmus. Thrombocytopenic purpura. Thrush associated with AIDS/HIV. Tibial ulcers. Tidal hectic fever. Tinnitus. Temporomandibular joint syndrome (TMJ with more swelling than pain). Ulcer. Ulcerative colitis. Umbilical palpitations. Urinary incontinence. Urinary pain. Uterine bleeding. Uterine prolapse. Vaginal bleeding during pregnancy. Vaginal discharge. Vaginal pain. Vaginal prolapse. Vaginitis. Varicose veins. Vertigo. Weakness and debility after a severe illness. Whole body pain.

* CANG ER ZI SAN - 蒼耳子散 - Xanthium Formula

ACTIONS - Disperses Wind. Alleviates pain. Unblocks the nose.

SYNDROMES - Wind-Cold with interior Heat in the muscles. Profuse nasal discharge due to Wind-Heat Attacking the head.

CLINICAL MANIFESTATIONS - Copious, purulent, foul nasal discharge. Nasal obstruction. Dizziness. Frontal or temporal headache. Fever. Intolerance of Cold. Muscle ache. Blood-shot eyes. Dry nose. Bitter taste in mouth. Insomnia.

HERBS AND ACTIONS

-Cang Er Zi - Disperses Wind, dispels Dampness and opens the nasal passages. With Xin Yi, unblocks the nasal passages and treats headache and profuse nasal discharge.

-Xin Yi - Expels Wind-Cold and unblocks the nasal passages.

-Bai Zhi - Releases the exterior, disperses Cold, opens the nasal orifices, disperses Wind-Dampness, alleviates pain and headache, reduces swelling and expels pus. With Cang Er Zi and Xin Yi, for headache due to nasal congestion with thick putrid discharge.

-Bo He - Disperses Wind-Heat, clears the head and eyes and benefits the throat.

TREATS

Rhinorrhea. Nasal suppuration. Acute or chronic rhinitis. Nasal congestion. Fever. Acute or chronic sinusitis. Allergic rhinitis. Accessory nasal sinuses. Headache.

* CHAI HU GUI ZHI TANG - 柴胡桂枝湯 - Bupleurum And Cinnamon Twig Formula

ACTIONS - Releases the Exterior and muscle layer. Harmonizes and releases the Shao-Yang. Harmonizes the Liver, Spleen and Intestines. Dispels Water Accumulation.

SYNDROMES - Shao-Yang stage disorders where the exterior has not been completely released (Tai Yang - Shao Yang). Epigastric pain due to Liver and Spleen disharmony.

CLINICAL MANIFESTATIONS - Joint pain with a crackling sensation. Epigastric pain. Fatigue. Gastrointestinal weakness. Headache. Heaviness in the head. Fever. Moderately severe chills. Distension beneath the Heart. Periumbilical or lower abdominal pain. Tenseness around the pubic bone. Subcostal pain. Epigastric fullness. Nausea. Mild vomiting. Mild thoraco-costal discomfort. Costal distress. Tension in the rectus abdominus. Chest distension. Abdominal pain. Abdominal distension. Constipation. Irritability. Insomnia. Repeated loss of spinal alignment due to muscular tension.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Concurrent administration with anticonvulsants, such as benzodiazepines has been found to have a synergistic effect in the treatment of epilepsy. Concurrent administration with pentobarbitol was associated with shortened pentobarbitol induced sleeping time in mice.

HERBS AND ACTIONS

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain, assists the Heart Yang and warms and facilitates the flow of Yang Qi in the chest, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels, warms the Middle and directs Turbid Yin downward. With Bai Shao for External Wind-Cold with disharmony between the Ying and Wei (Tai Yang Zhong Feng), with spontaneous sweating, fever and chills and warms and tonifies the Middle Jiao. With Chai Hu, for Tai Yang Stage moving to Shao Yang Stage.

-Huang Qin - Clears Heat and drains Fire especially from the Upper Jiao, dries Dampness and sedates Liver Yang rising. With Chai Hu, for Heat in the Shao Yang with alternating chills and fever, and nausea. With Bai Shao, for Dysenteric disorders with abdominal pain due to Heat entering the Interior.

-Ren Shen - Strongly tonifies Qi, tonifies the Lungs, strengthens the Spleen and Stomach and generates Fluids.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of the other herbs. With Bai Shao for abdominal pain due to disharmony between the Liver and Stomach. With Bai Shao and Huang Qin, for abdominal pain and dysenteric diarrhea from Damp-Heat.

-Ban Xia - Dries Dampness, transforms Phlegm, descends rebellious Qi, harmonizes the Stomach and stops vomiting. With Sheng Jiang, for vomiting. With Ren Shen,. for

vomiting due to Stomach Deficiency. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting.

-Bai Shao - Nourishes the Blood, regulates the menses, calms and curbs Liver Yang, alleviates pain, preserves Yin and adjusts the Ying and Wei. With Chai Hu for vertigo, dizziness, and flank pain due to Liver Qi Stagnation. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration.

-Chai Hu - Resolves the Shao Yang, reduces fever, spreads Liver Qi, relieves constraint and raises Yang Qi in Spleen and Stomach Deficiency patterns. With Huang Qin and Ban Xia, for Shao Yang disorders with alternating chills and fever and a sensation of fullness in the hypochondria and chest. With Huang Qin, Ban Xia, Ren Shen and Gan Cao, for weak patients. With Gan Cao, for hepatitis and upper right quadrant pain and Wind-Heat fever.

-Sheng Jiang - Releases the exterior, disperses Cold, warms the Middle Jiao, stops vomiting, stops cough, adjusts the Ying and Wei and reduces toxicity of other herbs. With Da Zao, Protects Stomach Qi and regulates the Ying and Wei. With Ban Xia, for vomiting due to many causes including Stomach Cold and productive cough due to Phlegm-Dampness. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis and warms and dispels thin mucus in the Stomach with nausea, hiccup, Stomach pain, acid reflux or vomiting of clear fluid. With Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens.

-Da Zao - Tonifies Qi, strengthens the Spleen and moderates and harmonizes the harsh properties of other herbs.

TREATS

Cholelithiasis. Chronic hepatitis. Acute hepatitis. Jaundice. Spleen disorders. Cholecystitis. Chronic appendicitis. Peritonitis. Intercostal neuralgia. Nephritis. Pyelitis. Nervous exhaustion. Female disorders. Hysteria. Epilepsy. Chiropractic disorders. Chronic Intestinal disorders. Skin rashes triggered by Cold. Hot flashes. Sleep that does not refresh. Migraines with a strong emotional involvement. Cirrhosis of the Liver. Chronic pancreatitis. Seizures. Trigeminal neuralgia. Chronic headaches. Cough. COPD. Depression. Weakness. Menopause syndrome. Arthralgia. Fever. Cardiac disorders. Neuritis. Common cold. Influenza. Pneumonia. Tuberculosis. Pleuritis. Gastralgia. Sour Stomach. Gastric hyperacidity. Gastric ulcer. Duodenal ulcer. Acute colitis. Intestinal ulcer. Common Cold or Influenza in patients with Internal disorders. Allergic rhinitis. Urticaria. Waking during sleep. Tension headaches. Arrhythmia. Acid reflux. Frozen shoulder. Neurasthenia. Painful obstruction. Insomnia. Chronic asthmatic bronchitis. Abdominal pain. Anorexia. Fatigue. Gastroenteritis. Constipation.

* ER XIAN TANG - 二仙湯 - Two Immortals Formula. Formula Of Curculigo And

Epimedium

ACTIONS - Replenishes Kidney Yin and Yang. Tonifies Kidney Jing. Purges Deficiency Fire. Regulates the Chong and Ren.

SYNDROMES - Kidney Yin and Yang Deficiency. Disharmony between the Chong and Ren Channels.

CLINICAL MANIFESTATIONS - Amenorrhea. Irregular menstruation. Hot flashes. Dizziness. Tinnitus. Night sweats. Perspiration. Nervousness. Muscular flaccidity. Fatigue. Mood swings. Cold feet. Lassitude. Frequent, clear urine. Irritability. Headache. Palpitations. Insomnia.

HERBS AND ACTIONS

-Xian Mao - Tonifies the Kidneys, strengthens Yang, expels Cold, eliminates Dampness and strengthens bones and sinews. With Yin Yang Huo, accentuates the effects of the herb.

-Yin Yang Huo - Tonifies Kidneys, strengthens Yang, dispels Wind-Cold-Damp, tonifies Yin and Yang, restrains Ascendant Liver Yang and strengthens sinews and bones.

-Ba Ji Tian - Tonifies the Kidneys,strengthens Yang, strengthens sinews and bones, disperses Wind and expels Damp-Cold.

-Dang Gui - Tonifies, invigorates and harmonizes Blood, regulates menses, disperses Cold, moistens Intestine, unblocks bowels, reduces swelling, expels pus, generates flesh and alleviates pain.

-Huang Bai - Drains Damp-Heat, especially from the Lower Jiao, drains Kidney Fire, drains Fire and relieves toxicity. With Zhi Mu, for Yin Deficiency fever with steaming bones and night sweats.

-Zhi Mu - Clears Heat from the Qi Stage, clears Heat from the Lung and Stomach, drains Fire, nourishes Yin, moistens Dryness, generates fluids and clears Heat.

TREATS

Hypertension. Psoriasis. Irregular menstruation. Hyperthyroidism. Hypofunction of the pituitary. Menopause. Chronic glomerulonephritis. Nephritis. Breast cancer. Insomnia. Amenorrhea. Nephropathy. Tinnitus. Fatigue. Hot flashes. Night sweats. Infertility with Candidiasis. Pyelonephritis. Polycystic Kidneys. Urinary tract infection. Renal vascular disease. Urticaria. Dermatosclerosis. Lupus erythematosis. Perimenopause syndrome. Premature ovarian failure, prevention. Frequent urination. Infertility. Aplastic anemia. Palpitations. Enuresis. Male menopause. Perspiration.

* JIA WEI XIAO YAO SAN (DAN ZHI XIAO YAO SAN) - 加味逍遙散 - Augmented Rambling Formula. Bupleurum and Paeoniae Formula. Moutan and Gardenia Rambling Formula. Free and Relaxed Formula with Moutan and Gardenia

ACTIONS - Pacifies the Liver. Spreads Liver Qi. Strengthens the Spleen. Nourishes the Blood and Yin. Regulates menstruation. Sedates the Heart. Clears Heat.

SYNDROMES - Liver Qi Stagnation turning to Heat with underlying Spleen and Blood Deficiency. Gu Syndrome.

CLINICAL MANIFESTATIONS - Irritability. Short temper. Restlessness. Fever or tidal fever. Red eyes. Dry mouth and throat. Palpitations. Lower abdominal pain. Difficult urination. Painful urination. Increased menstrual flow. Uterine bleeding. Early menstruation. Aching in limbs. Dizziness. Mental instability. Red face. Thirst. Turbid urine. Alternating chills and fever. Red cheeks. Wheezing. Nervousness. Headache. Dry mouth. Anorexia. Infertility. Abdominal pain. Spontaneous sweating or night sweats with fever. Anxiety. Dry eyes. Hypochondriac pain. Somnolence. Insomnia. Aching shoulders. Five Sole Heat. Earache. Premenstrual tension. Hot flashes. Fatigue. Lassitude. Depression. Constipation with flushing up. Pale complexion. Bitter taste in mouth. Vertigo. Abdominal distention near the umbilicus. Epistaxis. Irregular menstruation. Heaviness in the lower abdomen.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution during pregnancy. Contraindicated for those with underlying Deficiency and Cold. This formula may reduce tremors caused by antipsychotic-induced Parkinson's disease. This formula may be effective in treating menopausal symptoms induced by gonadotropin-releasing hormone agonist therapy without a negative effect on serum estradiol levels.

HERBS AND ACTIONS

-Dang Gui - Tonifies Blood, regulates menses, invigorates and harmonizes the Blood and reduces swelling. With Bai Shao, regulates and harmonizes Qi and Blood and relieves genital pain. With Gan Cao, moderates spasms and relieves abdominal pain. With Chai Hu and Bai Shao, for dysmenorrhea from Liver Qi Stagnation and Blood Deficiency. With Bai Shao and Fu Ling, for diarrhea during pregnancy with mild abdominal pain. With Mu Dan Pi, Zhi Zi, Chai Hu and Bai Shao, for early menstruation, bloating during menstruation, and irritability due to Qi Stagnation with Heat.

-Bai Shao - Calms Liver Yang, nourishes Blood, regulates menstruation and astringes Yin. With Dang Gui, nourishes Yin and Blood. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews for epigastric, hypochondriac or flank pain and muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and

harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Bai Zhu - Tonifies the Spleen, tonifies Qi and dries Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Chai Hu - Resolves Shao Yang disorders, reduces fever, spreads Liver Qi and relieves Stagnation. With Bai Shao, for Liver Blood Deficiency with Liver Qi Stagnation and vertigo, dizziness, thoracic and costal pain, and menstrual irregularity due to Liver Qi Stagnation. With Bo He, for emotional depression, a stifling sensation in the chest, and irregular menstruation due to Liver Blood Stagnation and Deficiency. With Gan Cao, for hepatitis and upper right quadrant pain. With Bai Shao, Dang Gui and Bo He, for Liver Qi Stagnation with stress and emotional distress.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, clears Deficiency Fire, activates the Blood, dispels Blood Stasis and clears Liver Fire. With Zhi Zi, Chai Hu and Bai Shao, for Fire from Stagnation leading to Liver Fire or Liver Yang Rising

-Zhi Zi - Clears Heat, reduces Fire, cools the Blood, disperses toxins, stops bleeding, activates the Blood, eliminates irritability and drains Damp-Heat. With Mu Dan Pi, resolves Qi Level Stagnation leading to Heat and Heat in the Blood, for dysmenorrhea, headache, dry, scratchy eyes and intercostal pain due to Liver Blood Deficiency and irregular menstruation, headache, red eyes, and thirst due to Liver Qi Heat from Stagnation. With Chai Hu, Mu Dan Pi and Bai Shao, for irritability and a short temper.

-Gan Cao - Tonifies the Spleen, tonifies Qi, clears Heat, relieves Fire toxicity and moderates and harmonizes the properties of other herbs.

-Bo He - Disperses Wind-Heat, cools and clears the head and eyes, benefits the throat and relieves Stagnation of Liver Qi. With Bai Shao and Chai Hu, for Liver Qi Stagnation with chest and flank distention.

-Sheng Jiang - Reduces the toxicity of other herbs.

TREATS

Menstrual problems. Neurasthenia. Leukorrhea. Chronic endometritis. Hysteria. Narcolepsy. Turbid urine. Oliguria. Retention of urine. Odontorrhagia. Epistaxis. Infertility. Premenstrual tension. Stomatitis. Premenstrual syndrome. Menopause. Anxiety. Stress. Urinary tract infection. Fibrocystic breasts. Abnormal uterine bleeding. Cervical dysplasia. Acne due to disharmony between the Chong and Ren (associated with menstruation). Raynaud’s Disease due to Liver Qi Stagnation with Internal Heat. Candidiasis. Chronic fatigue syndrome. Glaucoma. Metrorrhagia. Amenorrhea. Ischemic optic neuropathy. Vaginal pain. Breast cancer. Insomnia. Conjunctivitis. Dysentery. Cough. Acute tonsillitis. Trigeminal neuralgia. AIDS/HIV. Fever. Auditory hallucinations. Gastrointestinal neurosis. Schizophrenia. Abdominal pain. Anorexia. Hemafecia.

Depression. Herpes genitalia. Dizziness. Psychosis. Goiter. Hiatus hernia. Optic neuritis. Otitis media. Lung cancer. Postpartum uterine bleeding. Globus hystericus. Nocturnal emission. Indigestion. Excessive lactation. Premenstrual breast distention. Cervicitis. Red eyes. Prematurely gray hair. Chronic tonsillitis. Chronic hepatitis. Hepatomegaly. Gingivitis. Anxiety neurosis. Early-stage cirrhosis of the Liver. Urethritis. Cystitis. Irregular menstruation. Early menstruation. Anemia. Constipation. Eczema. Hyperkeratosis of the palms. Leukoderma. Basedow's disease. Climacteric disorders. Chronic or recurrent vaginal infections. Dysmenorrhea. Tendinitis. Menstrual pain and cramps. Emotional instability. Pelvic inflammatory disease. Wheezing due to Liver Fire Attacking the Lungs (mild). Hemorrhoids due to Central Qi Sinking with Liver Qi Stagnation and Damp Heat. Leaky gut syndrome. Giardiasis. Obesity. Polycystic ovary syndrome. Vaginal itch. Breast discharge. Headache. Premature ovarian failure. Irritable bowel syndrome. Gastralgia. Optic atrophy. Hematuria. Asthma. Gu syndrome. Breast cancer. Panic disorder. Stress-related breathing problems. Abdominal fullness and distention. Neurosis. Hypertension. Cushing's syndrome. Bi-Polar disorder. Fatigue. Vertigo. Hoarseness. Hernia. Lochiorrhea. Hot flashes. Palpitations. Meniere's disease. Spermatorrhea. Dermatitis. Abdominal pain during pregnancy. Scleroderma. Post-menopausal uterine bleeding. Cervical polyps. Ear pain. Vaginitis. Bipolar mood disorder.

* LIU WEI DI HUANG WAN - 六味地黄丸 - Six Ingredient Pills With Rehmannia. Rehmannia Six Formula

ACTIONS - Enriches Yin. Nourishes the Essence of the Liver and Kidney.

SYNDROMES - Kidney Yin Deficiency. Heart and Kidney Yin Deficiency. Liver and Kidney Yin Deficiency. Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency.

CLINICAL MANIFESTATIONS - Low back, knees and legs painful and weak. Foot pain. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five sole Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Dry skin. Deafness. Steaming bones. Delayed closing or unclosed fontanel in infants. Tidal fevers. Loose teeth. Dripping urine. Thirst. Dry tongue. Numbness and weakness at the waist and knees. Heel pain. Dry mouth. Dry throat. Blurred vision. Urinary incontinence. Spontaneous and nocturnal emissions. Night sweats.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen Deficiency type diarrhea and indigestion with a white greasy tongue coat. Use caution in areas where diseases are predominantly caused by Dampness. Contraindicated for those with Yang Deficiency. This formula has shown to induce marked improvement in patients who are undergoing chemotherapy.

HERBS AND ACTIONS

-Shu Di Huang - Tonifies the Kidneys and nourishes Jing, Yin and Blood. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Jing and Yin and stops perspiration. With Shan Yao, tonifies the Liver and Spleen. With Shu Di Huang and Shan Yao, for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and astringes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Mu Dan Pi - Clears Heat, cools the Blood clears and Deficiency Fire.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

TREATS

Neurasthenia. Pulmonary tuberculosis. Diabetes mellitus. Diabetes insipidus. Chronic nephritis. Hyperthyroidism. Chronic glomerulonephritis. Chronic urinary tract infections. Chronic renal failure. Hypertension. Failure to thrive. Functional uterine bleeding. Optic neuritis. Optic nerve atrophy. Central retinitis. Nephroatrophy. Senility. Impotence. Infertility. Spermatorrhea. Esophageal cancer. Chronic asthma. Bronchitis. Side effects of steroids. Cushing's syndrome. Thyroid adenoma. Nephrotic syndrome. Post-stroke sequelae. Side effects of chemotherapy. Retarded growth in children. Prostate cancer. Late menstruation. Chronic pharyngitis. Polycystic ovary syndrome. Dysmenorrhea. Hyperglycemia. Obesity. Premature ovarian failure. Common warts. Dizziness. Vertigo. Atrophy (Wei) Syndrome. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Urinary incontinence. COPD. Numbness. Parkinson's disease. Hyperthyroidism. Drug abuse. Constipation. Painful obstruction. Fever. Disciform lupus erythematosus. Myalgic encephalomyelitis. Chronic laryngitis. Impotence. Deafness. Low back pain. Palpitations. Gout. Fatigue. Hypotension. Jaundice. Vaginal discharge. Sciatica. Allergic disorders. Strangury. Gingivitis. Endocrine dyscrasia infertility. Sweating from the chest. Sjogren's Syndrome. Cervical cancer. Intracranial postoperative hydrocephalus. Whole body pain. AIDS/HIV/ARC. Ear pain. Nasal pain. Bronchiaesthenia. Chronic urticaria. Chronic hepatitis. Viral hepatitis. Nocturnal emissions. Spermatorrhea. Irregular menstruation. Addison’s disease. Congestive Heart failure. Sore throat. Dry mouth. Retarded growth

in children. Toothache. Vegetative nerve functional disturbance. Arteriosclerosis. Amenorrhea. Scanty menstruation. Infantile dysplasia. Infantile malnutrition. Menopause. Neurosis. Coronary Heart disease. Atrophic gastritis. Esophagitis. Oliguria. Miscarriage. Chronic prostatitis. Galacturia. Heel pain. Glaucoma. Panarthralgia. Prostatitis. Eczema. Tourette syndrome. Hashimoto's thyroiditis. Stroke. Knee pain. Cough. Meniere's disease. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Acute infectious multiple neuritis. The sequelae of poliomyelitis. Progressive muscular dystrophy. Polyuria in children. Hyperglycemia. AIDS/HIV. Paresthesia. Tremors. Anxiety. Anemia. Osteoarthritis. Fibrocystic breast disease. Behcet's disease. Epstein-Barr virus syndrome. Chronic fatigue syndrome. Chronic tonsillitis. Tinnitus. Knee pain. Hemafecia. Forgetfulness. Diverticulitis. Weakness. Hoarseness. Headache. Interstitial cystitis. Night sweats. Ascites. Aphasia. Periodontitis. Fetal restlessness. Fallopian tube blockage. Dry skin. Chemotherapy for breast cancer. Polymyositis. Erythema induratum. Leukopenia. Foot pain. Prematurely gray hair.

* XIANG SHA LIU JUN ZI TANG - 香砂六君子汤 - Six Gentlemen Formula With Aucklandia And Amomum. Saussurea and Cardamon Combination. Saussurea, Cardamon and the Six Gentlemen Formula. Aplotaxis-Amomum Formula

ACTIONS - Tonifies Qi. Strengthens the Spleen. Harmonizes the Stomach. Regulates Qi. Stops pain.

SYNDROMES - Spleen Qi Deficiency (with Phlegm-Damp and pain). Stomach Qi Deficiency. Stomach Cold. Gu Syndrome.

CLINICAL MANIFESTATIONS - Nausea and vomiting. Emaciation. Sallow complexion. Anorexia with a full feeling after very little food. Weak abdomen. Belching. Abdominal distention or pain (subtle). Rolled lips. Pale lips. Stiff tongue. Tired limbs. Heavy limbs. Chest fullness. Acid regurgitation. Epigastric distention or pain. Muscle weakness in arms and legs. Loose stools or diarrhea. Maybe bleeding. Thin muscles.. Lethargy-fatigue. Does not like to speak. Weak, soft voice. Maybe enuresis. Maybe abundant clear urine. Maybe cold extremities. Maybe borborygmus.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi and strengthens the Spleen and Stomach. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Gan Cao and Fu Ling, for Spleen and Stomach Qi Deficiencies with Dampness with anorexia, diarrhea, vomiting, abdominal distention and fatigue.

-Bai Zhu - Strengthens the Spleen, augments Qi and dries Dampness. With Fu Ling and Dang Shen, for Deficiency Cold of the Middle Jiao with abdominal pain, distention, vomiting and diarrhea. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiencies.

-Fu Ling - Dries Dampness, strengthens the Spleen and moderates the drying nature of Gan Cao. With Ban Xia, stops nausea and vomiting. With Ban Xia and Chen Pi, for nausea, vomiting and anorexia due to congested Fluids. With Mu Xiang, for diarrhea and borborygmus due to Dampness. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Gan Cao - Harmonizes, warms and strengthens the Middle Jiao and moderates the draining properties of Fu Ling. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency.

-Chen Pi - Circulates Qi, dries Dampness, transforms Phlegm, tonifies the Spleen, adjusts the Middle and helps prevent Stagnation from tonic herbs. With Bai Zhu, for manifestations of Damp-Obstruction due to Spleen Deficiency. With Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Sha Ren, for Dampness Obstructing the Spleen's transforming and transporting functions with reduced intake of food, diarrhea, belching, nausea, and a stifling sensation in the epigastrium due to Disharmony of the Stomach Qi, vomiting of unadulterated, or scanty but viscous fluids and assists digestion of greasy tonic herbs.

-Ban Xia - Dries Dampness, resolves Phlegm, harmonizes the Stomach, descends Rebellious Qi and stops vomiting. With Chen Pi, for Stomach Qi Disharmony with epigastric and abdominal distention or pain. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose, watery stools, treats Phlegm, thin mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia. With Ren Shen, for vomiting due to Stomach Deficiency.

-Sha Ren - Aromatically dries Dampness, stops vomiting, moves Qi, warms and strengthens the Spleen and Stomach, warms the Middle, stops diarrhea and prevents Stagnation from tonic herbs.) With Dang Shen, for abdominal pain and diarrhea due to Dampness Obstructing the Spleen and Stomach and morning sickness. With Ban Xia, for morning sickness. With Ren Shen and Bai Zhu, for Spleen and Stomach Deficiencies.

-Mu Xiang - Circulates Qi, stops pain, strengthens the Spleen and dispels Heat and Dampness.
With Sha Ren, Increases the flow of Qi in the digestive system as while reducing distention and Food Stagnation, alleviating pain and strengthening the Spleen. With Bai Zhu, for anorexia with epigastric and abdominal pain and distention. With Sha Ren, Ren Shen and Bai Zhu, for anorexia and abdominal distention and fullness which improves with warmth applied locally.

TREATS

Indigestion. Acute or chronic gastritis. Gastric or duodenal ulcer. Acute or chronic gastroenteritis. Gastroptosis. Gastric distention. Emotional instability. Chronic peritonitis. Irritable bowel syndrome. Post-surgical diarrhea. Cirrhosis of the Liver. Chronic fatigue syndrome. Candidiasis. Pernicious vomiting. Childhood eczema. Chronic dysentery. Abdominal pain. Uterine myoma. Enteritis. Chronic colitis. AIDS/HIV. Hypoglycemia. Food allergies. Bronchitis. Anemia. Breast cancer. Epstein-Barr virus syndrome. Abdominal fullness and distention. Stress. Intestinal tuberculosis. Fatigue. Gastrectasis. Enuresis. Jaundice. Obesity. Dyspnea. Fetal restlessness. Rickets. Nervous exhaustion. Gastralgia. Delayed menstruation due to Phlegm. Morning sickness. Obstruction. Chronic bronchitis. Bronchiectasis. Gastritis. Stomatitis. Anorexia. Leaky gut syndrome. Giardiasis. Acid reflux. Infertility. Hiccups. Optic atrophy. Vaginal discharge. Cholecystitis. Polyuria. Somnolence. Narcolepsy. Candidiasis. Nausea/Vomiting. Gu syndrome. Myalgic encephalomyelitis. Schizophrenia. Diarrhea. Gastric neurosis. Hypothyroidism. Weakness. Edema. Hiatus hernia. Urticaria. Liver cancer. Constipation. Chemotherapy for breast cancer.

* YIN QIAO SAN - 银翘散 - Honeysuckle And Forsythia Formula. Lonicera and Forsythia Combination (UPDATED)

ACTIONS - Disperses Wind-Heat. Cools Heat. Relieves toxicity.

SYNDROMES - Wind-Heat Attacks the Lungs. Wen Bing - Wei Stage Wind-Heat. Dry Heat. Summer Heat with Dampness. Damp Heat.

CLINICAL MANIFESTATIONS - Dry cough. Sore, red, swollen throat. Slight thirst, with desire to drink cold liquids. Runny or blocked nose. Fever with little perspiration. Slight chills. Maybe high fever. Aversion to Wind. Headache. May be dyspnea with flared nostrils.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - This formula must be significantly modified to treat Damp-Heat. Contraindicated for Wind-Cold.

HERBS AND ACTIONS

-Jin Yin Hua - Disperses Wind, clears Heat and relieves toxicity. With Gan Cao, for toxic swelling and sores. With Lian Qiao and Niu Bang Zi , for Wei Stage and Qi Stage Heat and pneumonia with Heat signs. With Lian Qiao, Jing Jie and Bo He, for Wind-Heat Attacks the Lungs. With Lian Qiao, Jing Jie and Niu Bang Zi, for throat swelling and pain.

-Lian Qiao - Disperses Wind, clears Heat and relieves toxicity. With Niu Bang Zi and Bo He, for Wei Stage Heat. With Jin Yin Hua, for Initial stage Wind-Heat.

-Jie Geng - Disperses the Lungs, stops cough, resolves Phlegm and descends Qi. With Gan Cao, for hoarseness and throat swelling and pain due to Wind-Heat Attacks the

Lungs.

-Niu Bang Zi - Disperses Wind-Heat, benefits the throat, relieves Heat and toxins, and spreads Lung Qi. With Bo He, for sores due to Wind-Heat, dry throat, cough with yellow sputum, incomplete expression of measles or pruritic rash. With Jie Geng and Bo He, and Jing Jie, for throat inflammation and productive cough due to Wind-Heat Attacks the Lungs. With Jin Yin Hua, Bo He, Lian Qiao, and Jie Geng, for Sore throat caused by a febrile disorder or Wind-Heat.

-Bo He - Relieves Wind-Heat and benefits the throat. With Jing Jie, for Wind-Heat. With Jing Jie, Lian Qiao and Jin Yin Hua, for Wind-Heat Attacks the Lungs. With Jing Jie, Niu Bang Zi and Lian Qiao, promotes the eruption of measles. With Niu Bang Zi, for Wind-Heat manifesting as sores, rashes, dry throat and cough with yellow sputum.

-Dan Dou Chi - Relieves the exterior. With Niu Bang Zi and Lian Qiao, for Wind-Heat. With Bo He, Jing Jie and Niu Bang Zi, for early stage Wind-Heat with fever and headache.

-Dan Zhu Ye - Generates Fluids, alleviates thirst and clears Heat.

-Jing Jie - Relieves the exterior. With Bo He, for Wind in the head. With Bo He, Jie Geng and Gan Cao, for acute cough associated with Wind. With Bo He, Jin Yin Hua and Lian Qiao, for External Wind-Heat with fever, headache and sore throat. With Bo He, Liang Qiao and Jie Geng, for Wind-Heat.

-Lu Gen - Generates Fluids, alleviates thirst and clears Lung Heat.

-Gan Cao - Harmonizes, generates Fluids, alleviates thirst, moistens the Lungs, resolves Phlegm, stops cough and clears Heat. With Jie Geng, for a sore throat in which the throat is not very red. With Jin Yin Hua, for damp rashes or acne. With Niu Bang Zi, strongly clears throat and Lungs to treat Wind-Heat Attacks the Lungs or Fire toxin flaring upwards.

-Jing Mi - Tonifies the Qi of the Lungs, Spleen and Intestines, stops restlessness, stops thirst and generates fluids.

TREATS

Acute bronchitis. Bronchiectasis. Common cold, initial-stage. Fever. Upper respiratory tract infection. Cough. Influenza. Initial stage of measles. Initial stage of mumps (epidemic parotitis). Pharyngitis. Acute tonsillitis. Acute endometritis. Early stage encephalitis B. Canker sores. Drug-induced dermatitis. Purulent otitis media. Epistaxis. Hordeolum. Acute laryngitis. Otitis media. Nausea/Vomiting. Myalgic encephalomyelitis. Perspiration. Dyspnea. Otorrhea. Pulmonary abscess. Lip pain. Coughing and asthma associated with AIDS/HIV. Pneumonia. Early stage Lung Abscess. Early stage meningitis. Herpes simplex (genitalia). Epstein Barr (herpes type). Mononucleosis.

Chronic Functional Immune Deficiency Syndrome (CFIDS). Allergies. Acute suppurative infection. Sinusitis. Viral myocarditis. Scarlet fever. Headache. Early stage cataracts. Early-stage conjunctivitis. Flat warts. Tinnitus. Deafness. Constipation. Chronic fatigue syndrome. Cervical lymphadenopathy. Puerperal fever. Toothache. Upper and middle back pain. Ear pain. Tongue pain. Sore throat.

* YU PING FENG SAN - 玉屏風散 - Jade Windscreen Formula. The Jade Screen Formula

ACTIONS - Tonifies Qi. Stabilizes the exterior. Stops sweat.

SYNDROMES - Spontaneous sweating due to Qi Deficiency. Spontaneous sweating due to Wei Qi Deficiency. Lung Qi Deficiency.

CLINICAL MANIFESTATIONS - Aversion to Wind and Cold. Spontaneous sweat. Recurrent colds. Shiny, pale complexion. Increased susceptibility to external invasion.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Excess patterns. Contraindicated for those with night sweats due to Yin Deficiency.

HERBS AND ACTIONS

-Huang Qi - Strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, tonifies Wei Qi, stabilizes the exterior and tonifies the Lungs (aids circulation of moisture downward from the face). With Fang Feng, stabilizes the exterior without causing the pathogenic influences to remain.

-Bai Zhu - Strengthens the Spleen, tonifies Qi. stabilizes the exterior and stops sweating. With Huang Qi, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Huang Qi and Fang Feng, for spontaneous sweat with aversion to Wind .

-Fang Feng - Releases the exterior and expels External Wind. With Huang Qi, prevents Wind from entering the skin.

TREATS

Common cold. Influenza. Chronic rhinitis. Allergic rhinitis. Chronic sinusitis. Upper respiratory tract infection. Exacerbation of chronic bronchitis. Mild bronchitis (especially in children). Hyperthyroidism. Bronchitis. Nephrotic syndrome. Cough. Cor Pulmonare. Autonomic dystonia. AIDS/HIV. Fatigue. Spontaneous perspiration. Postpartum convulsions. AIDS/HIV/ARC. Prevents colds and respiratory tract infection. Chronic glomerulonephritis. Urticaria. Bronchial asthma. Abnormal perspiration. Facial paralysis. Neurodermatitis. Pneumonia. Herpes zoster. Hay fever. Chronic obstructive pulmonary disease (COPD). Emphysema. Chronic fatigue syndrome. Nephritis. Dyspnea. Upper back pain. Spontaneous sweating and night sweats associated with AIDS/HIV.

1.3.3.9 RT-TCM-09

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_09

Cervical Spondylosis #1, Da Huang Fu Zi Tang, Nuan Gan Jian, San Bian Di Huang Tang, Shen Ling Liu Huang Tang, Tian Tai Wu Yao San, Xin Jia Xiang Ru Yin, Ye Ju Bai Du Tang, Yue Bi Tang

Recordings Updated in May 2025

* CERVICAL SPONDYLOSIS #1 Formula

ACTIONS - Releases Wind-Cold from the muscle layer. Relaxes and moistens the sinews. Regulates the Ying and Wei. Dispels Wind. Eliminates Dampness. Alleviates pain.

SYNDROMES - Wind-Cold-Dampness with Dampness Predominant.

CLINICAL MANIFESTATIONS - Head, neck, shoulder and upper back aching and pain. The feeling of a bag over the head. Fixed neck pain. Tender points on the neck. A possible palpable cord-like feeling in the neck. A stiff neck. Inhibited movement. Heavy, painful head. Back pain. Generalized pain or muscle ache. Difficulty bending or rotating trunk. Mild fever. Pain, soreness and numbness of the four limbs. Maybe weakness and heaviness of the upper limbs. Heavy-headedness. Aversion to Cold. Prefers Heat. Scanty urination.

HERBS AND ACTIONS

-Ge Gen - Clears Heat, disperses Wind, releases the muscles (especially of the neck and upper back) and relieves sinus congestion.

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Damp from the upper Tai Yang, unblocks Painful Obstruction, alleviates pain and guides Qi to the Tai Yang and DU channels. With Du Huo, for systemic Wind-Dampness. With Chuan Xiong, for headache and generalized body aches and pains associated with the common cold or painful obstruction. With Fang Feng, for pain due to External Wind-Dampness. With Fang Feng, Gao Ben and Chuan Xiong, for Wind-Damp headache.

-Du Huo - Releases the exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks Painful Obstruction (Bi) from the lower Tai Yang alleviates pain, increases joint mobility and guides Qi to the Tai Yang and Du Channels. With Fang Feng, for numbness in the legs. With Qiang Huo, for joint pain and numbness. With Qiang Huo, Fang Feng and Gao Ben, for Wind-Cold-Dampness with headache, chills and fever and muscle and joint pain.

-Gui Zhi - Releases the exterior, adjusts the Ying and Wei, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang, transforms Qi and releases the muscle layer. With Chuan Xiong, expels Wind-Dampness, warms the channels and collaterals, facilitates joint movement and relieves the discomfort of painful obstruction.

-Gao Ben - Expels Wind-Cold and Damp and alleviates pain. With Fang Feng, expels Wind-Dampness from the Tai Yang and reinforces Qiang Huo especially for headaches. With Qiang Huo, for headache and stiffness of the nape of the neck due to Wind-Dampness in the Du channel. With Fang Feng and Qiang Huo, for External Wind-Cold-Dampness.

-Fang Feng - Releases the exterior, expels Wind-Cold-Dampness, stops pain, expels Internal Wind, stops spasms, Moves Qi, tonifies the Spleen and treats gout. With Qiang Huo, Du Huo and Wei Ling Xian, for painful obstruction. with Cang Zhu, for pain due to Wind-Dampness Bi with aching joints, heavy limbs and generalized aching discomfort.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold and alleviates pain - good for headaches. With Fang Feng, Qiang Huo and Gao Ben, for Wind-Damp lateral headache. With Gao Ben, for severe headache without Interior Fire.

-Wei Ling Xian - Dispels Wind-Dampness, unblocks the channels and alleviates pain. With Qiang Huo, for Wind-Damp Bi causing joint pain, especially in the upper joints.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, induces sweating, expels Wind-Dampness and Clears Dampness from the Lower Jiao. With Qiang Huo, for a heavy-headed sensation.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels .

TREATS

Cervical spondylosis.

* DA HUANG FU ZI TANG - 大黃附子湯 - Rhubarb And Prepared Aconite Formula

ACTIONS - Warms the Interior. Disperses Cold. Unblocks the bowels. Alleviates pain.

SYNDROMES - Cold Accumulation in the Interior. Shao-Yang - Yang-Ming (Xu with Fu).

CLINICAL MANIFESTATIONS - Abdominal pain. Constipation. Hypochondriac pain. Chills. Low-grade fever. Cold hands and feet. Intolerance of Cold. Pain in the armpits. Unilateral pain in the abdomen and hypochondrium. Stiffness and spasms beside and below the umbilicus. Pain in the waist and legs.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Interior Heat Excess. Contraindicated for those with Deficiency Cold.

NOTES - If application causes a bowel movement, the prognosis is good, if it causes vomiting, increased chills or a thin pulse, it indicates a worsening of the condition which requires urgent attention.

HERBS AND ACTIONS

-Fu Zi - Warms the Yang, disperses Cold and Dampness, warms the channels and stops pain. With Xi Xin,disperses Cold and stops pain, for both Internal and External Cold damage with aversion to Cold, headache and generalized body aches with aching joints.

-Da Huang - Cleans the Intestines, purges Stagnation, treats hypochondriac pain and directs the actions of the other herbs to the intestines.

-Xi Xin - Expels Cold and disperses accumulations.

TREATS

Chronic dysentery. Uremia. Ulcerative colitis. Chronic colitis. Uncomplicated appendicitis. Uncomplicated intestinal obstruction. Hernia. Hypertension. Gastric spasms. Intestinal spasms. Periarthritis of the shoulder. Phlebitis. Keratitis. Tonsillitis. Chronic renal failure. Urticaria. Dermatitis from allergies to drugs. Uremia. Fever. Abdominal pain. Pyelonephritis. Renal calculi. Cholelithiasis. Chronic pancreatitis. Intestinal colic. Sciatica. Intercostal neuralgia. Migraine. Trigeminal neuralgia. Orchitis. Sties. Conjunctivitis. Purulent gingivitis. Lumbar disc disease. Eczema. Bacillary dysentery. Chronic pelvitis. Polyuria. Constipation. Enteritis.

* NUAN GAN JIAN - 暖肝煎 - WARM THE LIVER DECOCTION. Formula for Warming the Liver Channel

ACTIONS - Warms the Liver and Kidneys. Promotes Qi movement. Dispels Cold. Alleviates pain.

SYNDROMES - Small Intestine Qi Pain. Cold Stagnation in the Liver Channel. Cold type hernia.

CLINICAL MANIFESTATIONS - Sharp, localized lower abdominal pain. Pain aggravated by Cold. Post menstrual pain. Swelling, distention and pain of scrotum. May be nausea and anorexia.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Heat, redness, swelling and pain of the scrotum due to Damp-Heat in Lower Jiao.

HERBS AND ACTIONS

-Dang Gui - Invigorates and tonifies Liver Blood, disperses Cold and alleviates pain. With Fu Ling, strengthens Qi and Blood while promoting their movement.

-Gou Qi Zi - Nourishes and tonifies The Liver and Kidneys, and nourishes Blood and Yin. With Rou Gui, warms and tonifies the Liver and Kidneys.

-Xiao Hui Xiang - Warms the Kidneys, disperses Cold, spreads Liver Qi and alleviates pain. With Rou Gui and Wu Yao, for sharp, localized lower abdominal pain that is aggravated by Cold.

-Rou Gui - Warms the Kidneys, strengthens Ming Men Fire, disperses deep Cold and warms the channels.

-Wu Yao - Moves Qi, alleviates pain, disperses Cold and warms the Kidneys. With Chen Xiang, enhances the actions of Xiao Hui Xiang by moving Qi and alleviating Lower Jiao pain. With Rou Gui, for abdominal pain, especially sensations of Cold and pain in the lower abdomen. With Dang Gui, disperses Cold and stops pain, for abdominal pain due to External Cold.

-Chen Xiang - Moves and descends Qi, warms the Kidneys and alleviates pain. With Wu Yao, for lower abdominal pain, especially with lower abdominal Cold and tension and a stifling sensation in the chest and diaphragm with wheezing, distention, and anorexia. With Rou Gui, for Spleen and Stomach Deficiency Cold with epigastric, abdominal and hypochondriac Cold pain. With Xiao Hui Xian, for Spleen and Stomach Deficiency Cold with epigastric, abdominal and hypochondriac Cold pain. With Mu Xiang, for Rebellious Middle Jiao Qi with belching, hiccup, nausea and vomiting, epigastric and abdominal distention stifling sensation in the epigastrium and diarrhea.

-Fu Ling - Drains Dampness and strengthens the Spleen. With Sheng Jiang, treats nausea and anorexia. With Mu Xiang, for diarrhea and borborygmus due to Dampness.

-Sheng Jiang - Disperses Cold and harmonizes the Stomach.

TREATS

Varicocele. Hydrocele. Inguinal hernia. Orchitis. Urinary stones. Testicular hernia.

Abdominal pain. Endometriosis. Raynaud's disease. Anorexia. Pelvic inflammatory disease. Irritable bowel syndrome. Chronic appendicitis. Dysmenorrhea. Post tubal ligation pain. Vaginal hernia. Prostatitis. Postpartum pain. Infertility. Abdominal Cold. Impotence.

* SAN BIAN DI HUANG TANG - 散边地黄汤 - Scatter The Inclined Rehmannia Decoction

ACTIONS - Invigorates the Blood. Transforms Stasis. Dredges the Liver. Tonifies the Spleen. Nourishes the Kidneys. Tonifies Jing. Fills the Marrow.

SYNDROMES - Complex post-concussion syndrome.

CLINICAL MANIFESTATIONS - Headache. Dizziness. Irritability. Palpitations. Fear. Agitation. Unsteadiness. Anxiety. Depression. Tinnitus. Deafness. Memory loss. Lack of concentration. Irritability. Worry.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Jing and Blood, fills the Marrow and nourishes Liver and Kidney Yin. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Yao and Shan Zhu Yu, for dizziness, a weak and sore low back, night sweats, impotence and spermatorrhea due to Kidney and Liver Yin Deficiency.

-Bai Shao - Nourishes the Blood, calms Liver Yang and Liver Wind and alleviates pain.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Shu Di Huang, Shan Yao and Gou Qi Zi, for True Yin Deficiency.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and alleviates pain.

-Shan Yao - Tonifies Kidney Yin and astringes Jing. With Shan Zhu Yu and Shu Di Huang, for Kidney Deficiency with spermatorrhea and night sweats.

-Bai Zhi - Expels Wind, eliminates Dampness, dispels Cold and alleviates pain. With Chuan Xiong, for headaches.

-Xiang Fu - Spreads and regulates Liver Qi. With Chuan Xiong, for Qi Stagnation combined with Blood Stasis.

-Bai Jie Zi - Promotes Qi movement, dissipates nodules, unblocks the collaterals, expels Phlegm and alleviates pain.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, clears Deficiency Fire, invigorates the Blood and dispels Blood Stasis.

-Gan Cao - Moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

TREATS

Post-concussion syndrome.

* SHEN LING LIU HUANG TANG - 參苓六黃汤 - Ginseng And Poria Six Yellows Decoction

ACTIONS - Strengthens the Spleen. Tonifies Qi. Enriches Yin. Drains Heat.

SYNDROMES - Qi and Yin Deficiency.

CLINICAL MANIFESTATIONS - Enduring low back and sacral soreness and pain. Perineal pain. Testicular sagging and distention. Symptoms worse with fatigue. Dizziness. Insomnia. Heart palpitations.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, promotes urination, reduces edema and generates Body Fluids. With Di Huang and Huang Bai, for Yin Deficiency with night sweats.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Fu Ling, for Spleen and Stomach Deficiency with fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea. With Huang Qi, for Lung and Spleen Qi Deficiency with fatigue, shortness of breath, diarrhea and anorexia.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm.

-Huang Jing - Tonifies Spleen Qi, nurtures Stomach Yin, .moistens Lung Yin, tonifies the Kidneys and strengthens Jing.

-Che Qian Zi - Promotes urination, clears Damp-Heat and clears Liver Heat.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin

and clears Damp-Heat in the Lower Jiao. With Di Huang, powerfully clears Deficiency Fire Blazing Upward with pain and swelling of the gums, epistaxis, hematemesis and other hemorrhage in the upper body.

-Huang Lian - Clears Heat, drains Dampness and stops bleeding. With Di Huang, for Insomnia and delirium due to unremitting Heat injuring the Ying level.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao and drains Deficiency Heat.

-Pu Huang - Invigorates Blood, dispels Blood Stasis and promotes urination.

TREATS

Prostatitis.

* TIAN TAI WU YAO SAN - 天臺烏藥散 - Top Quality Lindera Powder. The Lindera Root Powder

ACTIONS - Promotes Qi movement. Spreads Liver Qi. Scatters Cold. Alleviates pain.

SYNDROMES - Hernia due to Small Intestine Qi Pain. Hernia due to Cold Stagnation in the Liver Channel.

CLINICAL MANIFESTATIONS - Lower abdominal pain radiating to the testicles. May be localized sensation of Cold. Menstrual pain and hardness. Hypochondriac pain. Abdominal pain. Mobile abdominal masses. Swollen or distended testicles. Flank pain. Leukorrhea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat. Do not take with Qi tonics.

HERBS AND ACTIONS

-Wu Yao - Moves Qi, disperses stagnant Liver Qi, warms the Kidneys, disperses Cold and alleviates pain. With Xiao Hui Xiang, Mu Xiang Qing Pi and Gao Liang Jiang, for Cold-type hernia with lower abdominal pain that radiates to the testicles.

-Mu Xiang - Moves Qi, alleviates pain, strengthens the Spleen, prevents Stagnation and adjusts and regulates Intestinal Qi. With Qing Pi, for abdominal pain, distention and belching. With Xiao Hui Xiang, Qing Pi and Gao Liang Jiang, strengthens the actions of Wu Yao. With Bing Lang, for Qi Stagnation in the Stomach and Intestines due to Food Stagnation with abdominal distention, and fullness and distention, anorexia, aversion to the smell of food, nausea without the ability to vomit and an uncomfortable urge to defecate which is often unsuccessful, Intestinal parasites with a pressing pain around

the umbilicus and intermittent focal distention in the abdomen and relieves tenesmus and the passage of mucus in dysenteric disorders. With Wu Yao, for lower abdominal Coldness and pain.

-Xiao Hui Xiang - Warms the Lower Jiao, disperses Cold, spreads Liver Qi, harmonizes the Stomach and alleviates pain. With Chuan Lian Zi, strongly stops pain and regulates Qi to treat bulging disorders and mobile masses in the lower abdomen.

-Qing Pi - Regulates Qi, disperses stagnant Liver Qi, dissipates accumulations, reduces Food Stagnation, dries Dampness and transforms Phlegm. With Wu Yao, Gao Liang Jiang, Xiao Hui Xiang and Mu Xiang, for Cold Invading the Liver channel, with lower abdominal pain radiating down to the testicles or ovaries. With Wu Yao, Chuan Lian Zi, Xiao Hui Xiang, Bing Lang and Mu Xiang, for Intestinal prolapse, feeling of genital prolapse or testicular swelling due to chronic orchitis.

-Gao Liang Jiang - Disperses Cold and alleviates pain. With Xiao Huo Xiang, for abdominal hernial pain.

-Bing Lang - Descends Qi, removes stagnation, unblocks the bowels, relieves nausea and breaks up obstructions in the Lower Jiao. With Mu Xiang and Qing Pi, for Food Accumulation and Qi Stagnation.

-Chuan Lian Zi - Regulates Qi and alleviates pain. Prepared with Ba Dou, soothes the Liver, while its bitter, Cold properties are greatly diminished.

-Ba Dou - Used to prepare Chuan Lian Zi and then discarded.

TREATS

Hernia. Inguinal hernia. Scrotal hernia. Epididymitis. Irritable bowel syndrome. Gastritis. Intestinal obstruction. Endometriosis. Infertility. Low back pain. Colitis. Pelvic inflammatory disease. Hernia of the Small Intestine. Vaginal or testicular hernia. Hypochondriac pain. Orchitis. Primary dysmenorrhea. Peptic ulcer. Prostatitis. Dysmenorrhea. Vaginal discharge. Abdominal pain. Constipation.

* XIN JIA XIANG RU YIN - 新加香薷飲 - Newly Augmented Mosla Formula

ACTIONS - Releases Exterior Summerheat. Releases External Cold. Clears Heat. Resolves Dampness.

SYNDROMES - Severe early-stage Summerheat in the Lungs with superimposed Wind-Cold Invasion.

CLINICAL MANIFESTATIONS - Fever and chills. Anhidrosis. Headache. Thirst. Flushed face. Tightness in the chest. Aversion to Cold. Fatigue. Aching body. Nausea. Reduced,

dark urination.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated when fever is accompanied by sweating. Discontinue when sweating has occurred. Do not use long-term.

HERBS AND ACTIONS

-Xiang Ru - Releases the Exterior, harmonizes the ascending and descending functions of the Spleen and disperses stagnant Fluids by expelling Cold and Dampness from the Middle Jiao. With Bai Bian Dou, for sudden turmoil disorder due to externally contracted Cold in the summertime. With Bai Bian Dou and Hou Po, for Exterior Cold and Interior Dampness presenting with fever, anhidrosis, headache, thirst, vomiting and diarrhea (frequently found in Summerheat stroke). With Jin Yin Hua and Bai Bian Dou, for early stage Summerheat with superimposed contraction of Cold with fever, chills, anhidrosis, headache and a flushed face.

-Bian Dou Hua - Relieves Summerheat, removes Dampness and controls bleeding. (Does not appear in every version.)

-Bai Bian Dou - Clears Summerheat and strengthens the Spleen. With Xiang Ru and Hou Po, for sudden turmoil disorder due to Summeheat and Dampness. With Xiang Ru and Jin Yin Hua, for Summerheat fever without sweat.

-Hou Po - Expels Dampness and disperses fullness due to Stagnation.

-Jin Yin Hua - Clears Heat, relieves Fire Toxicity, expels Wind-Heat and clears Damp-Heat from the Lower Jiao. With Lian Qiao, for toxic Heat.

-Lian Qiao - Clears Heat and toxins and expels Wind-Heat.

TREATS

Common cold. Upper respiratory tract infection. Gastroenteritis. Influenza. Oliguria. Numbness. Nausea/Vomiting. Diarrhea. Food poisoning. Acute pancreatitis. Peptic ulcer. Cholecystitis. Headache. Bacillary dysentery. Cholera. Lyme disease. Abdominal pain. Paresthesia. Fever. Chronic fatigue syndrome. Acute colitis. Heat stroke. Chronic pancreatitis. Gastritis. Fatigue. Indigestion.

* YE JU BAI DU TANG - 野菊敗毒汤 - Chrysanthemum Formula To Defeat Toxin

ACTIONS - Clears Heat. Drains Fire. Relieves toxicity. Cools the Blood. Reduces swelling.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Local inflammation with pus. Deep-rooted, hard and painful boils. Erythema. Swelling. Heat. Carbuncles. Furuncles. Fever and chills. The lesions appear on the head, face and extremities. The lesions are grain-like with a hard base. The lesions are yellowish-purplish in color. Pain. A tingling sensation. Blisters. Fistulae,

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Deficiency fevers. Contraindicated for those with ulcerated lesions.

HERBS AND ACTIONS

-Ye Ju Hua - Drains Fire and resolves toxicity. With Jin Yin Hua and Pu Gong Ying, for furuncles. With Jin Yin Hua, Zi Hua Di Ding and Pu Gong Ying, for carbuncles and furuncles.

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin, drains Fire, relieves toxicity, softens hardness, dissipates nodules and transforms Phlegm-Heat. With Jin Yin Hua and Gan Cao, for boils, carbuncles and furuncles. With Jin Yin Hua, Lian Qiao and Zi Hua Di Ding, for swollen abscesses and toxic sores.

-Lian Qiao - Clears Heat especially in the Upper Jiao, relieves toxicity, reduces abscesses and dissipates clumps. With Ye Ju Hua and Jin YIn Hua, for initial stage warm febrile disease.

-Zi Hua Di Ding - Clears Heat, relieves Fire toxicity and clears hot sores. With Ye Ju Hua, Jin Yin Hua and Lian Qiao, for pustules on the fingertips (snakehead furuncles), red thread furuncles (lymphangitis), carbuncles and other red swellings. With Pu Gong Ying, for Breast abscesses, furuncles, boils and carbuncles and Damp-Heat jaundice. With Ye Ju Hua, Jin Yin Hua and Pu Gong Ying, for various toxic swellings such as erysipelas, abscesses and deep-rooted sores

-Jin Yin Hua - Clears Heat and resolves Fire toxicity. With Lian Qiao, for various Heat disorders. With Gan Cao, for toxic swellings and sores. With Gan Cao and Xuan Shen, for sloughing ulcers from Heat toxicity. With Pu Gong Ying, Ye Ju Hua and Zi Hua Di Ding, for sores, lesions carbuncles, ulceration of the skin and furuncles. With Pu Gong Ying, Ye Ju Hua and Lian Qiao, for boils, carbuncles and furuncles.

-Pu Gong Ying - Reduces abscesses, dissipates nodules and relieves Fire toxicity. With Jin Yin Hua, Ye Ju Hua, Lian Qiao and Zi Hua Di Ding, for all hot, painful, hard, and deep-rooted boils.

-Zhe Bei Mu - Clears Heat, transforms Phlegm and dissipates nodules. With Jin Yin Hua, Pu gong Ying and Ye Ju Hua, for abscesses and other toxic swellings. with Lian Qiao, clears Heat toxin, transforms turbid Phlegm, opens Stagnation and disperses clumped swellings.

-Gan Cao - Clears Heat, relieves Fire toxicity, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Jin Yin Hua, for damp rashes or acne. With Pu Gong Ying, for for abscesses or other toxic swellings. With Jin Yin Hua, Pu Gong Ying, Lian Qiao and Zi Hua Di Ding, for Yang sores marked by redness, swelling and pain.

TREATS

Furuncles. Carbuncles. Erythema. Boils. Fistulas.

* YUE BI TANG - 越婢汤 - Maidservant From Yue Formula. Formula for Edema. Ma Huang and Gypsum Combination

ACTIONS - Induces sweating. Releases the Exterior. Disseminates the Lung Qi. Promotes urination. Eliminates water accumulation. Eliminates Heat.
SYNDROMES - Wind edema.

CLINICAL MANIFESTATIONS - Aversion to Wind. Generalized edema that begins in the face. Slight fever or no fever. Slight but continuous sweating or no sweating. Absence of thirst or. Thirst. Decreased urination. Asthma. Dysuria. Coughing.

HERBS AND ACTIONS

-Ma Huang - Induces sweating, releases the exterior, disseminates and facilitates Lung Qi, calms wheezing, stops coughing, promotes urination, reduces edema and warms and disperses Cold pathogens. With Shi Gao for Wind-edema.

-Shi Gao - Clears Excess Heat from the Lungs. With Sheng Jiang, decreases muscular swelling.

-Sheng Jiang - Releases the exterior, disperses Cold, warms the Lungs and stops cough. With Da Zao for External Wind-Cold.

-Gan Cao - Moistens the Lungs, resolves Phlegm, stops cough and moderates and harmonizes the properties of other herbs.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Edema. Facial edema. Primary nephritis. Dermatic nephritis. Rheumatoid arthritis. Hydrocele. Keratitis. Nephrotic syndrome. Cough. Asthma. Nephritic edema. Sore throat. Arthritis of the lower limbs. Initial stage of dropsy. Carbuncles. Beriberi. Acute nephritis. Eczema. Inguinal hernia. Painful obstruction. Oliguria. Fever. Spontaneous

perspiration.

1.3.3.10 RT-TCM-10

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_10

Acute Kidney Failure #1, Alopecia #6, Alopecia #8, Diabetes #3, Multiple Sclerosis #1, Sciatica #1, Stroke #1, Tendon Bi #1, Urolithiasis #1

Recordings Updated in May 2025

* ACUTE KIDNEY FAILURE #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Fire. Reduces Fire toxicity. Transforms Dampness. Drains water downward/

SYNDROMES - Toxic Damp-Heat.

CLINICAL MANIFESTATIONS - Oliguria. Fever. Thirst. Dry mouth. Low back pain. Colicky pain in the low back, possibly radiating to the groin.

NOTES - This formula is toxic. Do not use for an extended period of time.

HERBS AND ACTIONS

-Da Huang - Drains Heat and Fire, purges accumulations, transforms Dampness, promotes urination and reduces Fire toxicity. With Gan Sui, for accumulation of pathogenic Heat and fluids in the chest and upper abdomen.

-Ba Dou - Purges accumulated Cold, drives out water and reduces edema.

-Gan Sui - Drains water downward and eliminates congested fluids and thin mucus.

TREATS

Acute Kidney failure.

* ALOPECIA #6 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Cools the Blood. Extinguishes Wind. Nourishes Yin. Protects the hair.

SYNDROMES - Blood Heat Generates Wind.

CLINICAL MANIFESTATIONS - Sudden hair loss. Rapidly evolving into large round or oval bare patches. Occasional itching. Maybe loss of hair in the eyebrows, moustache and beard. Maybe a sensation of Heat in the scalp. Maybe irritability. Maybe irascibility. Maybe restlessness.

HERBS AND ACTIONS

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Xuan Shen, for Excess or Deficiency Heat patterns.

-Mu Dan Pi - Clears Heat, cools invigorates and harmonizes the Blood, dispels Blood Stasis, drains pus and reduces swelling. With Sheng Di Huang, for Ying and Xue Stage Heat.

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin and relieves toxicity.

-Ce Bai Ye - Cools the Blood and promotes hair growth. With Sheng Di Huang, for all types of bleeding due to Heat in the Blood.

-Sang Ye - Disperses and scatters Wind-Heat and cools the Blood.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin and moistens Dryness.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, reduces swelling, expels pus and generates flesh.

-Sang Shen - Tonifies the Blood and enriches Yin.

-Bai Xian Pi - Clears Heat, resolves Fire-toxicity, expels Wind and dries Dampness.

TREATS

Alopecia.

* ALOPECIA #8 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Invigorates the Blood. Disperses Wind.

SYNDROMES - Blood Stagnation Generates Wind.

CLINICAL MANIFESTATIONS - Sudden patches of hair loss. Dizziness. Vertigo. Tinnitus. Blurred vision. Sensation of Heat rushing to the head. Insomnia. Dream disturbed sleep. Numbness. Twitching and spasms in the extremities. Trembling tongue. Light-headedness. Headache or a stabbing pain in the scalp precedes alopecia. May persist to develop into complete baldness. Frequent nightmares. Difficulty falling asleep. Restlessness with a feverish sensation. Grinding of the teeth.

HERBS AND ACTIONS

-Dang Gui - Invigorates and harmonizes the Blood. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, clears Heat and cools the Blood.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Tao Ren and Hong Hua, for headache from Blood Stagnation.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Hong Hua, invigorates the Blood for all types of Blood Stagnation.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis and opens the channels.

-Ce Bai Ye - Cools the Blood and promotes hair growth.

-Bai Zhi - Expels Wind.

-Cong Bai - Releases the exterior and induces sweating.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, adjusts the Ying and Wei and reduces the toxicity of other herbs.With Da Zao, nourishes the Blood, prevents injury from harsh Blood movers and assists the movement of Qi.

TREATS

Alopecia.

* DIABETES #3 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes Yin. Reduces Fire.

SYNDROMES - Kidney Yin Deficiency.

CLINICAL MANIFESTATIONS - Polyuria. Frequent nocturia. Cloudy urine. Dry mouth. Night sweats. Five Sole Heat. Tidal fever. dizziness. Tinnitus. Low back and knee soreness and weakness. Itching. Impotence. Premature ejaculation. Dark, blackish facial complexion. Eyes are black or green. Ears are wilted. Limbs emaciated. Feet and shins painful and weak.

HERBS AND ACTIONS

-Shu Di Huang - Strongly enriches Yin, relieves wasting and thirsting disorder, nourishes Jing and Blood and fills the Marrow. With Shan Yao and Ze Xie, for ascendant Fire due to exhaustion of Kidney Yin. With Shan Zhu Yu, Shan Yao and Ze Xie, for Xiao Ke with predominant polyuria.

-Shan Yao - Tonifies Kidney Yin, astringes Jing, tonifies the Spleen, and nourishes Stomach Yin. With Mai Dong and Wu Wei Zi, for Lung Deficiency with cough. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea and night sweats.

-Dan Shen - Activates the Blood, dispels Blood Stasis, clears Heat and soothes irritability.

-Mai Dong - Moistens the Lungs, nourishes Lung and Stomach Yin, generates Fluids, Moistens the Intestines, clears the Heart and eliminates irritability.

-Wu Wei Zi - Tonifies the Kidneys, astringes sweat, generates fluids, astringes Jing and stops diarrhea and spermatorrhea. With Shu Di Huang, Shan Yao and Shan Zhu Yu, for Lung and Kidney Deficiency with coughing and wheezing.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, clears Deficiency Fire, activates the Blood and dispels Blood Stasis. With Ze Xie, Fu Ling and Shan Zhu Yu, for spermatorrhea due to Kidney Yin Deficiency with Heat.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiency of the Liver and Kidneys. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Ze Xie - Promotes urination, leaches out Dampness and drains Kidney Fire.

-Hong Hua - Activates the Blood, dispels Blood Stasis, opens the channels, unblocks

menstruation and alleviates pain.

TREATS

Diabetes.

* MULTIPLE SCLEROSIS #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes and Astringes Jing and Yin. Tonifies Yang.

SYNDROMES - Jing Insufficiency. Yin Deficiency. Yang Deficiency. Kidney Yang Deficiency.

CLINICAL MANIFESTATIONS - Feeling chilled. Withdrawn, subdued behavior. Aversion to Cold. Tinnitus. Cold limbs. Impotence. Spermatorrhea. Premature ejaculation. General debility. Pale face. Low libido. Urinary frequency with abundant, clear urine. Female infertility ("uterus cold and infertile"). Oliguria with edema. Maybe nocturia. Maybe anorexia. Lassitude. Dizziness. Maybe chronic diarrhea or "cock crow" diarrhea. Maybe loose stools. In adults: Hair loss. Graying or whitening of hair. Weak sexual function. Atrophy and weakness of feet with difficulty walking. Poor memory. Senility (premature or mature). Brittle bones. Gradual deterioration of hearing. In children: Retardation in mental and/or physical development. Failure to thrive. Late or incomplete closing of fontanel. Poor bone development. Brittle bones.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Yin, Jing and Blood. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Mai Dong - Moistens the Lung, nourishes Stomach Yin, generates Fluids, clears the Heart, eliminates irritability, moistens Intestines and resolves Phlegm.

-Rou Cong Rong - Tonifies the Kidneys, strengthens Yang and benefits Jing and marrow.

-Ba Ji Tian - Tonifies the Kidneys, strengthens Yang, strengthens sinews and bones, disperses Wind and expels Cold-Damp.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing, nourishes Liver and Kidney Yin and tonifies Kidney Yang. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiencies of the Liver and Kidneys.

-Wu Wei Zi - Tonifies Qi, nourishes Kidney Yin, astringes Jing, tonifies the Heart and calms the Spirit.

-Yuan Zhi - Calms the Spirit, sedates the Heart, expels Phlegm, opens the Orifices and clears the channel joining the Heart and Kidneys.

-Shi Chang Pu - Harmonizes the Middle Jiao, transforms turbid Dampness, opens the Orifices, vaporizes Phlegm, disperses Wind, calms the Spirit, and alleviates Wind-Damp Bi. With Yuan Zhi, calms the Spirit and open orifices

-Pi Pa Ye - Descends Lung Qi, transforms Phlegm, clears Lung Heat, harmonizes the Stomach, descends Stomach Qi and clears Stomach Heat.

TREATS

Multiple sclerosis.

* SCIATICA #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Unblocks Yang Qi. Promotes the movement of Qi. Dispels Wind. Eliminates Dampness. Clears Heat. Unblocks the channels and collaterals. Stops pain.

SYNDROMES - Wind-Cold-Damp Bi.

CLINICAL MANIFESTATIONS - Sciatica pain. The pain is intense and moves around. Swollen painful joints (especially lower limbs). Joints are warm to the touch (may be burning and swollen). The pain is worse at night. Reduced range of motion. Joint degeneration or deformity in the lumbar region. Chills. Anhidrosis. Weight loss. Shortness of breath. Muscular atrophy. Difficulty walking and moving. Thirst. Hemiplegia. Rigidity of the limbs. Headache. Dizziness. Vertigo. Nausea. Vomiting. Edema. Emaciation. Swollen feet. Numbness of the extremities. Paralysis. Fatigue.

HERBS AND ACTIONS

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

-Cao Wu - Disperses Cold, scours out Wind, overcomes Dampness and stops pain.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity and clears Damp-Heat from the Lower Jiao.

-Zi Cao - Clears Heat, cools the Blood, invigorates Blood circulation, relieves Fire toxins.

-Wu Mei - Astringes leakage of Lung Qi, stops leakage of sweat, generates fluids, alleviates thirst and alleviates pain.

-Yi Tang - Tonifies the Middle Jiao and alleviates pain and coldness.

TREATS

Sciatica.

* STROKE #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes the Yin of the Liver and Kidneys. Extinguishes Endogenous Wind. Nourishes the muscles.

SYNDROMES - Liver and Kidney Yin Deficiency Generates Wind

CLINICAL MANIFESTATIONS - Fatigue. Muscle spasms with alternating flexion and extension of the extremities. Prostration. Clonic convulsions. Dizziness - worse with stress or anger. Tinnitus. Aphonia. Insomnia. Dream-disturbed sleep. Sore low back and knees. Nocturnal emissions. Often the patient is on the verge of shock. Hemiatrophy of the muscles. Hemiplegia. Hemianasthesia. Flaccidity of the legs.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-He Shou Wu - Tonifies the Liver and Kidneys, nourishes the Blood and nourishes Jing.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Yin Yang Huo - Tonifies the Kidneys, strengthens Yang, dispels Wind-Cold-Dampness and warms and unblocks the flow of Yang Qi.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Dang Gui and Shu Di Huang, for night sweats due to Yin Deficiency.

-Nu Zhen Zi - Nourishes and tonifies the Liver and Kidney Yin.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin. With Shu Di HUang, for Liver and Kidney Deficiency.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints.

-Sang Zhi - Dispels Wind-Dampness, unblocks the channels and collaterals, benefits the joints and stops spasms.

TREATS

Stroke. Aphasia. Cerebral vascular accident. Hemiplegia.

* TENDON BI #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Warms the channels. Dispels Cold. Eliminates Dampness. Relaxes the tendons.

SYNDROMES - Tendon Bi due to Cold-Damp .

CLINICAL MANIFESTATIONS - Pain and weakness of the tendons and joints. Joints can be bent but not stretched. Excessive eating and drinking. Excessive desire to eat (bulimia). Insatiability. Nightmares. Horrible dreams of fighting etc. Frequent urination. Contracting pain in the affected limb. Heaviness. Limited movement. Pain worse at night. Pain worse in Damp weather. Preference for warmth.

HERBS AND ACTIONS

-Qiang Huo - Releases the exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels, With Du Huo, for Wind-Dampness.

-Du Huo - Dispels Wind-Dampness, disperses Wind-Cold-Dampness, releases the Exterior and alleviates pain. With Qiang Huo, for joint pain and numbness. With Ma Huang, for Wind-Cold with anhidrosis, and body aches and pains.

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

-Cao Wu - Disperses Cold, scours out Wind, overcomes Dampness and stops pain.

-Yi Yi Ren - Strengthens the Spleen, resolves Dampness, expels Wind-Dampness, clears Damp-Heat and relieves pain.

-Ma Huang - Induces sweating, releases the Exterior, promotes urination, reduces edema and warms and disperses Cold pathogens. With Gui Zhi, for Wind-Cold-Damp Bi.

-Mu Gua - Relaxes sinews, increases Qi and Blood circulation and unblocks the channels. With Du Huo, for weakness and atrophy of the muscles of the lower extremities.

-Shen Jin Cao - Dispels Wind, eliminates Dampness, relaxes the sinews, invigorates the collaterals and invigorates Blood.

-Wu Jia Pi - Dispels Wind-Dampness, nourishes and warms Liver and Kidneys, strengthens the sinews and bones, transforms Dampness and reduces swelling.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Chuan Wu and Cao Wu, for Bi syndrome.

TREATS

Tendon Bi. Sciatica.

* UROLITHIASIS #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Promotes the movement of Qi. Resolves hardenings. Invigorates the Blood. Dispels Blood Stasis. Promotes urination. Drains Damp-Heat from the Urinary Bladder.

SYNDROMES - Urinary Bladder Damp-Heat with Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - Urinary frequency. Urinary urgency. Painful urination or. Continuous dripping of urine or. Sudden interruption to the urinary stream. Turbid urine or. Pus and blood in the urine or. Sand and stones in the urine. Colicky pain in the low back, possibly radiating to the groin.

HERBS AND ACTIONS

-Xiang Fu - Spreads and regulates Liver Qi and alleviates pain.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure and resolves hardenings. With Yu Jin, for Liver Qi Stagnation with a stifling sensation in the chest and fullness in the epigastrium and abdomen with Heat signs and stabbing pain in the chest, flanks and abdomen due to Blood Stagnation.

-Yu Jin - Invigorates the Blood, dispels Blood Stasis, regulates Qi flow, clears Heat, cools the Blood and alleviates pain. With Jin Qian Cao, for pain due to Stone Lin.

-Guang Jin Qian Cao - Clears Heat, promotes urination, unblocks painful urinary dysfunction and expels stones.

-Hai Jin Sha - Clears Heat, promotes urination, unblocks painful urinary dysfunction, expels stones, eliminates Damp-Heat, reduces edema and decreases jaundice. With Hua Shi and Gan Cao, for Milky Lin.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat, cools the Blood and reduces abscesses.

-Ze Lan - Invigorates the Blood, dispels Blood Stasis, regulates menstruation, promotes urination and disperses swellings. With Dan Shen and Yu Jin, for chest and hypochondriac pain due to Qi and Blood Stagnation.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei.

-Hua Shi - Promotes urination, drains Heat from the Urinary Bladder, aids the movement of gravel and stones, expels Damp-Heat and stops bleeding due to Heat.

-Gan Cao - Moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

TREATS

Urolithiasis.

1.3.3.11 RT-TCM-11

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_11

Blepharitis #1, Cough #1, Dementia #1, Peripheral Neuropathy #1, Qi And Blood Stagnation #1, Sinusitis #1, Thrombophlebitis #3, Topical #1, Toxic Fire #1

Recordings Updated in May 2025

* BLEPHARITIS #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Damp-Heat. Drains Fire. Relieves Fire toxicity. Clears Wind-Heat affecting the eyes and head.

SYNDROMES - Toxic Heat. Wind-Heat.

CLINICAL MANIFESTATIONS - Inflammation of the lid margins. Redness of the eyelids. Drooping of upper eye lid. Thickening and faking of skin on the lids. Crusting at the lid margins, generally worse on waking. Cysts at the lid margin (hordeolum). Red eye. Burning. Gritty sensation of the eye or foreign-body sensation. Reduced vision. Photophobia. Tearing. Eye itching. Debris in the tear film.

HERBS AND ACTIONS

-Ku Shen - Clears Heat, dries Dampness, disperses Wind and stops itching.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity.

-Fang Feng - Releases the exterior and expels External Wind. With Jing Jie, expels Wind and stops itching for pruritic rash and initial-stage boils.

-Huang Qin - Clears Heat, dries Dampness, drains Fire and detoxifies. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease.

-Jing Jie - Releases the exterior, expels Wind, vents rashes and relieves itching. With Fang Feng, for pruritic itching. With Fang Feng, Jin Yin Hua and Lian Qiao, for early-stage carbuncles, furuncles, and abscesses.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity and vents and disperses External Wind-Heat. With Lian Qiao, for Various Heat disorders. With Lian Qiao and Huang Qin, for unremitting high fever. With Huang Qin, for suppurating boils that have not ulcerated, or have ulcerated but are not discharging pus.

-Di Fu Zi - Clears Damp-Heat, promotes urination, expels Dampness, stops itching and clears Wind-Heat affecting the eyes and head. With Ku Shen, for skin irritation and itchiness due to Damp-Heat.

-Huang Bai - Drains Fire and relieves Fire toxicity. With Huang Lian and Lian Qiao, for skin abscesses and lesions.

-Lian Qiao - Clears Heat (especially in the Upper Jiao), relieves toxicity, reduces abscesses and dissipates clumps. With Jin Yin Hua, for initial stage Wind-Heat.

TREATS

Blepharitis.

* COUGH #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Disperses Wind and Cold. Releases Lung Qi. Relieves cough.

SYNDROMES - Wind-Cold Attacks the Lungs.

CLINICAL MANIFESTATIONS - Cough with a heavy sound. Thin white sputum. Headache. stuffy and runny nose. Aching of limbs. Chilliness. Anhidrosis.

HERBS AND ACTIONS

-Ma Huang - Induces sweating, releases the Exterior, disseminates and facilitates Lung Qi, calms wheezing, stops coughing and warms and disperses Cold pathogens. With Xing Ren and Chen Pi, for wheezing and dyspnea due to Qi and Phlegm Stagnation.

-Xing Ren - Stops cough and calms wheezing. With Ma Huang, for cough and wheezing due to Excess. With Chen Pi, strongly descend Qi and disperse Phlegm-Dampness and calms wheezing to treat cough and wheezing from Phlegm-Dampness leading to Lung Qi Stagnation. With Ma Huang and Gan Cao, for cough with profuse sputum, nasal obstruction and a hoarse voice.

-Jie Geng - Opens the Lungs, spreads Lung Qi, expels Phlegm, benefits the throat and opens and raises Lung Qi, directing the effects of other herbs to the upper body. With Gan Cao, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat.

-Qian Hu - Expels Phlegm and descends Qi. With Bai Qian, for cough due Wind Invasion affecting the Lungs.

-Gan Cao - Moistens the Lungs, resolves Phlegm and stops cough and moderates and harmonizes the harsh properties of other herbs.

-Zi Su Ye - Releases the Exterior, disperses Cold, improves Lung function expands the chest, and relieves Cold induced wheezing. With Jie Geng, for common colds with nasal congestion and productive cough. With Jie Geng, Xing Ren and Qian Hu, for common colds with nasal congestion, lack of sweat and productive cough with stronger cough alleviating effect.

-Xuan Fu Hua - Expels Phlegm, removes pathogenic water and descends Qi.

-Bai Qian - Descends Qi, expels Phlegm and stops cough.

-Chen Pi - Regulates Qi, adjusts the Middle,relieves the diaphragm, dries Dampness, descends Qi and transforms Phlegm It is primarily used for vomiting and belching and for treating Phlegm-Damp coughs.

TREATS

Cough.

* DEMENTIA #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Resolves Phlegm. Opens the Orifices.

SYNDROMES - Turbid Phlegm Blocking the Orifices.

CLINICAL MANIFESTATIONS - Dull appearance. Dementia. Slow response. Poor memory. Muttering to oneself. Stuffy chest. Anorexia. Excessive, sticky salivation.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness and transforms Phlegm. With Chen Pi, for Phlegm-Damp Obstruction. With Fu Ling, for Phlegm, thin mucus and turbid Dampness.

-Chen Pi - Dries Dampness and transforms Phlegm. With Cang Zhu and Fu Ling, for a thick white tongue coat with no desire to drink. With Ban Xia and Fu Ling, for accumulation of Dampness and Phlegm.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen, harmonizes the Middle Jiao, quiets the Heart, calms the Spirit and soothes the nerves.

-Gan Cao - Tonifies the Spleen, augments Qi, resolves Phlegm, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Cang Zhu - Strongly dries Dampness and tonifies the Spleen.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm, removes filth, calms the Spirit, transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen and promotes the movement of Qi. With Tian Nan Xing and Ban Xia, for Wind-Stroke from Phlegm Blocking the Heart Orifices with muddled consciousness and a stiff tongue with aphasia.

-Bai Jie Zi - Warms the Lungs, regulates Qi and expels Phlegm.

-Tian Nan Xing - Dries Dampness and expels Phlegm. With Ban Xia and Shi Chang Pu, for Phlegm turbidity deranging the orifices of the head and veiling them leading to seizures and convulsions. With Cang Zhu, for Wind-Damp painful obstruction.

TREATS

Senile dementia.

* PERIPHERAL NEUROPATHY #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Strengthens the Spleen. Tonifies Qi.

SYNDROMES - Spleen and Stomach Qi Deficiency.

CLINICAL MANIFESTATIONS - Paralysis of the four extremities which is more severe in the lower limbs. Swelling and distention of the hands and feet. Poor appetite. Abdominal distention. Muscular cramping and pain. Possible emaciation. A sallow, yellow lusterless facial complexion. Loose stools.

HERBS AND ACTIONS

-Dan Shen - Invigorates the Blood and dispels Blood Stasis.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Fu Ling, for Spleen and Stomach Deficiency with fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Gui Zhi, warms and transforms fluids, unblocks Yang and promotes urination.

-Shan Yao - Tonifies the Spleen and nourishes Stomach Yin.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction and alleviates pain.

-Xu Duan - Tonifies the Liver and Kidneys, strengthens the sinews and bones, promotes the movement of Blood and alleviates pain.

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation and unblocks the channels.

-Chen Pi - Regulates Qi, adjusts the Middle and relieves the diaphragm.

-Gui Zhi - Warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels.

TREATS

Peripheral neuropathy.

* QI AND BLOOD STAGNATION #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Moves Qi. Invigorates the Blood.

SYNDROMES - Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - Hemiplegia. Pains that move around. Chest and epigastric pain. Flank pain. Insidious abdominal pain. Distention. Depression. Irritability. Pain is worse with pressure. Dark complexion. Fixed, palpable masses. Bleeding with clots. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas,. Varicose and spider veins. Cold hands and feet. Shortness of breath. Weakness. Tendency to hemorrhage dark blood or clots.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain.

-Cang Zhu - Strongly dries Dampness and tonifies the Spleen.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and alleviates pain. With Dang Gui, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. With Dang Gui, Tao Ren and Hong Hua, for headaches from Blood Stagnation. With Chai Hu and Chi Shao, for Liver Qi and Blood Stagnation generating headaches and/or chest pain.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis. With Tao Ren, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain. With Tao Ren, Dang Gui, Chi Shao and Chuan Xiong, for menstrual pain or amenorrhea.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat and cools the Blood. With Chuan Xiong, Dang Gui and Pu Huang, for Blood-Stasis induced gynecological disorders such as immobile abdominal masses, amenorrhea with abdominal pain, abscesses, boils and trauma induced pain.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and disperses Cold. With Huang Qi, for Qi and Blood Deficiency.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Huang Qi, raises the Clear Yang due to abnormal descent of Qi.

-Pu Huang - Invigorates the Blood and dispels Blood Stasis.

TREATS

Post-stroke paralysis. Coronary Heart disease. Chronic hepatitis. Dry skin.

* SINUSITIS #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat and Fire. Resolves Fire toxicity. Disperses Wind and Dampness. Opens the nasal passages. Clears Excess Heat from the Lungs. Clears Blazing Stomach Fire.

SYNDROMES - Stagnation of Heat in the Lungs and Stomach.

CLINICAL MANIFESTATIONS - Yellowish, turbid nasal discharge. Frontal headache. Foul breath. Constant stuffy nose. Mouth breathing during sleep.

HERBS AND ACTIONS

-Jin Yin Hua - Clears Heat and resolves Fire toxicity and vents and disperses External Wind-Heat. With Huang Qin, for suppurating boils that have not ulcerated, or have ulcerated but are not discharging pus. With Dang Gui, reduces obstruction and toxicity for swollen, painful sores and necrosis of surrounding tissue.

-Pu Gong Ying - Reduces abscesses, dissipates nodules, relieves Fire toxicity and clears Heat in the Blood.

-Huang Qin - Clears Heat, dries Dampness, drains Fire and detoxifies.

-Da Qing Ye - Clears Heat and resolves Fire toxicity. With Jin Yin Hua, for toxic Heat sores, erysipelas, mumps, or sore throat.

-Cang Er Zi - Disperses Wind and Dampness and opens nasal passages. With Xin Yi Hua, for blocked nose due to Wind-Cold and chronic sinusitis.

-Xi Xin - Releases Exterior Wind and Cold, warms the Lungs, transforms Phlegm and Thin Mucus and disperses and unblocks the Qi of the nasal orifices.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst, clears Excess Heat from the Lungs and clears Blazing Stomach Fire. With Xi Xin, for toothache and gum swelling due to Blazing Stomach Fire.

-Dang Gui - Tonifies Blood, invigorates and harmonizes the Blood, disperses Cold, moistens the Intestines and unblocks the bowels.

-Xin Yi Hua - Expels Wind-Cold and unblocks the nasal passages. With Cang Er Zi, strongly unblocks nasal obstruction and sinus headache due to Wind-Cold or Wind-Heat

for sinusitis and rhinitis with loss of sense of smell. With Xi Xin, lifts and spreads the clear Qi while unblocking the nasal orifices to treat headache and sinus distention, nasal congestion and thick nasal discharge due to Wind-Cold and with cooling herbs, for Wind-Heat.

-Yu Xing Cao - Clears Heat, relieves toxicity, reduces swellings and abscesses and expels pus (acts especially on the Lungs).

TREATS

Sinusitis.

* THROMBOPHLEBITIS #3 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Nourishes the Blood.

SYNDROMES - Qi and Blood Deficiency.

CLINICAL MANIFESTATIONS - Fatigue. Loose stools. Poor appetite. Dizziness. Pale face. Weak voice. Shortness of breath. Reluctance to speak. Sweating with little or no exertion. Palpitations. Insomnia. Dry skin. Dry hair. Poor memory. Paleness. Scanty periods.

HERBS AND ACTIONS

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Fu Ling, for Spleen and Stomach Deficiency with fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting. With Dang Gui and Shu Di Huang, for Qi and Blood Deficiency with dizziness, weakness and lassitude. With Bai Zhu, Dang Gui and Bai Shao, for Qi and Blood Deficiency.

-Fu Ling - Dries Dampness and strengthens the Spleen. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Dang Gui - Tonifies and invigorates the Blood, moistens the Intestines and regulates the relationship between the Liver and Kidneys. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach and relieves numbness and pain. With Dang Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous

sweating. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Dan Gui, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesia.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, nourishes the Blood and calms the Spirit.

-Chuan Xiong - Invigorates the Blood, activates Qi, releases constraint and alleviates pain. With Dang Gui, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis for Blood Deficiency. With Dang Gui, Shu Di Huang and Bai Shao, for a headache from Blood Deficiency.

-Bai Zhu - Tonifies the Spleen, augments Qi and dries Dampness.

-Bai Shao - Tonifies Blood and preserves Yin. With Shu Di Huang, strongly tonifies Liver Blood. With Shu Di Huang and Dang Gui, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Dang Gui, nourishes Yin and Blood.

-Shu Di Huang - Strengthens the Liver and Kidneys, and nourishes the Yin of the Blood. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Bai Shao, Dang Gui and Chuan Xiong, for anemia. With Ren Shen, Bai Zhu, Fu Ling, Dang Gui and Bai Shao, for anemia with fatigue and weakness. With Dang Gui, Bai Shao and Chuan Xiong for anemia.

TREATS

Thrombophlebitis.

* TOPICAL #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Fire. Relieves Fire toxicity. Clears Heat topically. Invigorates the Blood. Promotes the movement of Qi. Reduces swelling. Expels pus. Generates flesh.

SYNDROMES - Topically for bacterial infections, eczema and swollen or infected boils and carbuncles.

CLINICAL MANIFESTATIONS - Skin rashes. Swollen or infected furuncles or boils.

HERBS AND ACTIONS

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin, softens hardnesses, dissipates nodules, transforms Phlegm-Heat, drains Fire and relieves toxicity.

-Dang Gui - Invigorates and harmonizes the Blood, stops pain due to Blood Stasis,

reduces swelling, expels pus, and generates flesh.

-Chi Shao - Reduces swelling from sores and abscesses.

-Huang Bai - Drains Fire and relieves Fire toxicity.

-Huang Qin - Clears Heat, dries Dampness, drains Fire and detoxifies. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos.

-Huang Lian - Clears Heat topically.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain, reduces swelling, generates flesh and promotes healing.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, reduces swelling and generates flesh. With Mo Yao, topically as a powder for skin lesions and ulcerations.

TREATS

Bacterial infections. Eczema. Swollen or infected furuncles or boils.

* TOXIC FIRE #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Toxic Fire.

SYNDROMES - Toxic Fire.

CLINICAL MANIFESTATIONS - Pain. Swelling in the joints. Fever. Chills. Headache. Fatigue. Severe muscle aches. Conjunctivitis. Hemorrhages. Jaundice. Kidney and Liver dysfunction.

HERBS AND ACTIONS

-Chuan Xin Lian - Clears Heat, dries Dampness and resolves Fire toxicity.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity and clears Damp-Heat from the Lower Jiao.

-Da Qing Ye - Clears Heat, resolves Fire toxicity, cools the Blood and dissipates maculae. With Jin Yin Hua, for Toxic Heat sores, erysipelas, mumps, or sore throat.

-Ban Zhi Lian - Clears Heat, resolves Fire toxins, invigorates the Blood, reduces swellings, promotes urination and reduces edema.

-Tu Fu Ling - Relieves toxicity, eliminates Dampness and benefits the joints.

TREATS

Lyme disease. Leptospirosis.

1.3.3.12 RT-TCM-12

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_12

An Tai Yin #3, Autism #1, Barthinolitis #1, Bronchial Asthma #1, Cervical Spondylosis #3, Hypertension #1, Obesity #1, Sick Sinus Syndrome #1, Ulcer #1

Recordings Updated in May 2025

* AN TAI YIN #3 Formula (Dr. Joel Penner, americandragon.com). Dang Gui And Parsley Combination #3

ACTIONS - Tonifies Blood. Stabilizes pregnancy.

SYNDROMES - Blood Deficiency

CLINICAL MANIFESTATIONS - Vaginal tract bleeding after having stopped menstruating. The amount of Blood is sometimes excessive and sometimes scanty. The Blood is fresh red or pale red. Low back soreness or, low back and knee soreness and weakness. Lower abdominal insidious pain. A sensation of downward sagging. A lusterless facial complexion. Essence spirit withering. Heart palpitations. Shortness of breath. Torpid intake. Nausea. Loose stools. Frequent urination. Heart vexation. Insomnia. A dry mouth. Desire to drink. Dry, bound stools.

HERBS AND ACTIONS

-Dang Shen - Tonifies the Middle Jiao and augments Qi. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting.

-Bai Zhu - Tonifies the Spleen, augments Qi and calms the fetus. With Huang Qin, for restless fetus with internal Heat and unstable pregnancy with Qi Deficiency and Interior Heat.

-Sang Ji Sheng - Nourishes the Blood and calms the womb.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, regulates the menses, disperses Cold and stops pain due to Blood Stasis.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and calms the fetus.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin, strengthens Kidney Yang, stabilizes the menses and stops bleeding. With Du Zhong and Ji Xue Teng, for hypertension due to Liver and Kidney Deficiencies.

-Ji Xue Teng - Invigorates and tonifies the Blood.

Huang Qin - Clears Heat and calms the fetus. With Bai Zhu and Dang Gui, for restless fetus due to Heat.

TREATS

Pernicious vomiting. False labor. Low back pain. Dyspnea. Threatened miscarriage. Habitual miscarriage. Knee pain.

* AUTISM #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Heart Qi. Nourishes Heart Yin and Blood. Activates Heart Blood. Removes Phlegm Obstructing the Orifices. Calms the Shen.

SYNDROMES - Heart Qi, Blood and Yin Deficiency.

CLINICAL MANIFESTATIONS - Shyness. Inattention. Depression. Mood swings. Obsessions. Palpitations. Irritability. Anxiety. Easily startled. Insomnia. Much dreaming. Poor memory. Dizziness. Pale face and lips.

HERBS AND ACTIONS

-Ren Shen - Tonifies Heart Qi and calms the Spirit.

-Mai Dong - Nourishes Lung and Stomach Yin, generates Fluids, clears the Heart and eliminates irritability.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm, calms the Spirit and promotes Blood flow of Qi and Blood. With Yuan Zhi, for forgetfulness and dulled senses.

-Dang Gui - Tonifies, activates and harmonizes the Blood.

-Yuan Zhi - Calms the Spirit, sedates the Heart, clears the channel joining the Heart and Kidney, expels Phlegm and opens the Orifices.

-Ru Xiang- Activates the Blood and promotes the movement of Qi.

-Chuan Xiong - Activates the Blood and promotes the movement of Qi. With Dang Gui, harmonizes, nourishes and activates the Blood and disperses Blood Stasis.

TREATS

Autism.

* BARTHOLINILITS #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Resolves toxins.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Local inflammation with pus. Deep-rooted, hard and painful boils. Erythema. Swelling. Heat. Carbuncles. Furuncles. Fever and chills. Pain.

HERBS AND ACTIONS

-Jin Yin Hua - Clears Heat, resolves Fire toxicity and clears Damp-Heat from the Lower Jiao.

-Pu Gong Ying - Reduces abscesses, dissipates nodules, clears Heat, resolves Dampness and relieves Fire toxicity.

-Tu Fu Ling - Relieves toxicity, eliminates Dampness and clears Damp-Heat from the skin. With Pu Gong Ying, for Damp-Heat in the Liver/Gallbladder.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, invigorates the Blood, dispels Blood Stasis, drains pus and reduces swelling. With Chi Shao, for purpuric rashes.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat, cools the Blood and reduces swelling from sores and abscesses. With Mu Dan Pi, cools the Blood and disperses Stasis.

-Yan Hu Suo - Invigorates the Blood, circulates Qi and stops pain.

-Chai Hu - Spreads Liver Qi and relieves Stagnation.

TREATS

Bartholinitis. Bartholin's cysts.

* BRONCHIAL ASTHMA #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Releases the Exterior. Unblocks Yang. Clears Heat. Dries Dampness. Drains Fire. Detoxifies. Clears Liver Fire. Moistens the Lungs. Resolves Phlegm. Stops cough.

SYNDROMES - External Wind Invasion. Liver Fire Scorches the Lungs.

CLINICAL MANIFESTATIONS - Lung-distension. Wheezing with a productive cough. Dyspnea. Panting. Yellow or white mucus which is difficult to expectorate. Thick phlegm. A dry mouth with a desire to drink. Maybe no thirst A choking sensation in the chest. A sense of fullness in the chest and diaphragm. The eyes look like they are popping out of their sockets. Facial edema. Chills. Oliguria. A mild to moderate fever. Maybe the sound of sputum rattling in the throat. Dry stools. Maybe headache. Maybe nervousness. Maybe anxiety. Coughing fits with hemoptysis. Burning pain in chest and sides. Dizziness. Face and eyes red. Bitter taste in mouth. Dry lips. Short-tempered. Irascibility. Restlessness. Maybe dark urine. Maybe constipation.

HERBS AND ACTIONS

- Huang Qin - Clears Heat, dries Dampness, drains Fire, detoxifies and calms ascending Liver Yang.

-Gan Cao - Moistens the Lungs, resolves Phlegm, stops cough, clears Heat and relieves Fire toxicity.

-Gui Zhi - Releases the Exterior, assists Yang, unblocks Yang and transforms Qi and thin mucus. With Gan Cao, for palpitations and shortness of breath due to injured Yang of the chest.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood and clears Liver Fire.

TREATS

Bronchial asthma. Dyspnea. Chronic obstructive pulmonary disease (COPD).

* CERVICAL SPONDYLOSIS #3 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Expels Damp. Transforms Phlegm. Breaks up Stasis. Unblocks the channels.

SYNDROMES - Phlegm and Blood Stagnation with Blood Stagnation more pronounced.

CLINICAL MANIFESTATIONS - Head, neck, shoulder, upper back and upper arm aching and pain. Severe lancinating pain. Fixed pain. Pain worse at night and better during the day. Pain worse with pressure. Dizziness. Heaviness of the head with a wrapping sensation. Cramping of the four limbs. Vexation. Agitation. Palpitations. Chest oppression. Distention of the flanks. Dry mouth. Poor appetite. Nausea. Vomiting. Loose or sticky stools. A feeling of obstruction in the throat. Coughing with copious sputum. Abdominal and epigastric fullness and distention. The fingernails are cyanosed, sunken, concave and lack luster. Dry, itchy skin. The arm may be contracted. Maybe heaviness, numbness, coldness and/or edema of the limbs. Severe cases:. Mental and spiritual confusion. Loss of consciousness.

HERBS AND ACTIONS

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Xuan Fu Hua - Expels Phlegm and removes pathogenic water. With Zhi Ban Xia, for congested fluids.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness and paralysis.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Ban Xia - Dries Dampness, transforms Phlegm, dissipates nodules and reduces Stagnation.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis and relieves pain.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ban Xia, treats Phlegm, thin mucus and turbid Dampness.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold and adjusts the Ying and Wei, normalizing the flow of Qi at the center. With Ban Xia, for Phlegm-Dampness.

TREATS

Cervical spondylosis.

* HYPERTENSION #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Invigorates Blood. Breaks up Blood Stasis. Prevents stroke.

SYNDROMES - Blood Stagnation.

CLINICAL MANIFESTATIONS - Facial color dark and dull. Emaciation. Sides and ribs distended on both sides (maybe with sharp pain). Enlargement of Liver and Spleen. Suffocating sensation in chest. Tendency to sigh. Melancholy. Depression. Irritability. Inappropriate anger. Women: Irregular menses. Dysmenorrhea. Breast distention and pain before and during menses.

HERBS AND ACTIONS

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat, cools the Blood, clears Liver Fire and relieves eye pain.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat and soothes irritability.

-Niu Xi - Invigorates the Blood, expels Blood Stasis and descends Blood and Fire.

-Zhen Zhu - Sedates the Heart and settles tremors and palpitations.

-Xia Ku Cao - Clears Liver Fire, brightens the eyes and treats hypertension.

TREATS

Hypertension. Stroke prevention.

* OBESITY #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Strengthens the Spleen. Resolves Damp0ness. Reduces Food Stagnation. Resolves Phlegm. Purges accumulations.

SYNDROMES - Spleen Qi Deficiency with Food Stagnation and Phlegm.

CLINICAL MANIFESTATIONS - Obesity with a long history of a bad diet. Dislike of speaking. Sweating on exertion. Aversion to Cold. Puffy face. Poor appetite. Abdominal fullness after eating. Fatigued spirit. Weakness of the extremities. Somnolence. Loose stools. Clear, thin vaginal discharge. Bland taste in the mouth. Epigastric fullness, distention and pain with dislike of pressure. Belching with rotten food smell. Acid regurgitation. Detests food or. Vomits after eating. Distention is reduced after vomiting. Unformed stools or. Knotted constipation.

HERBS AND ACTIONS

-Fan Xie Ye - Drains downward and guides out Stagnation. With Chen Pi, strengthens the actions of restoring normal bowel movements and ameliorates its cold, colicky properties

-Ze Xie - Promotes urination and leaches out Dampness. With Ban Xia, for Turbid Dampness in the Middle Jiao causing epigastric and abdominal distention. With Bai Zhu, for Spleen Deficiency leading to accumulation of Dampness with urinary difficulty, loose stools, diarrhea, Milky Lin or vaginal discharge.

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, promotes urination and reduces edema. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Lai Fu Zi - Reduces Food Stagnation, transforms accumulation, promotes digestion, eliminates distention, descends Qi and reduces Phlegm. With Ban Xia, for distention and vomiting due to Food Stagnation. With Bai Zhu, for Food Stagnation with Spleen Deficiency.

-Shan Zha - Reduces and guides out Food Stagnation, transforms accumulations, transforms Blood Stasis, invigorates Blood circulation and dissipates clumps.

-He Ye - Raises and clears Spleen Yang.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, stops vomiting and harmonizes the Stomach. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Bai Zhu, for anorexia and other symptoms of Damp Obstruction due to Spleen Deficiency.

TREATS

Obesity.

* SICK SINUS SYNDROME #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Warms Yang. Replenishes Qi.

SYNDROMES - Heart and Kidney Yang Deficiency.

CLINICAL MANIFESTATIONS - Chest stuffiness. Twinges in the precordial region. Palpitations. Shortness of breath. Dizziness. Occasional fainting. Fatigue. Weakness. Dizziness. Low back weakness and pain. Aversion to Cold. Cold limbs. Restlessness. Insomnia.

HERBS AND ACTIONS

-Fu Zi - Warms Ming Men Fire and assists Heart, Kidney and Spleen Yang. With Ren Shen, for severe Deficiency of Source Qi and Collapse of Yang with cold extremities, sweating, weak breathing, dizziness and an extremely pale complexion. With Ren Shen and Gui Zhi, for weak Heart Yang with palpitations, shortness of breath and chest pain. With Huang Qi, for spontaneous sweat and chills due to Yang Deficiency. With Xi Xin, for Cold damage both Internal and External with aversion to Cold, headache and generalized body aches with aching joints. With Ma Huang and Xi Xin, for a Wind-Cold Attack with preexisting Yang Deficiency.

-Ren Shen - Powerfully tonifies Yuan Qi, tonifies Heart Qi and calms the Spirit. With Huang Qi, for Qi Deficiency with general debility, anorexia and spontaneous sweat.

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen and raises the Yang Qi of the Spleen and Stomach. With Ren Shen or Dang Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweating. With Fu Zi, for Yang Deficiency with spontaneous sweat.

-Yu Zhu - Nourishes Yin, moistens Dryness, moistens the Lungs, nourishes the Stomach and generates fluids. With Dang Shen, for Painful obstruction of the chest in cases with both Yin and Qi Deficiency.

-Gui Zhi - Assists Heart Yang, warms and facilitates the flow of Yang Qi in the chest and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Ma Huang, for Wind-Cold-Damp Bi. With Fu Zi, for chills, an occipital headache, backache and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi .

-Ma Huang - Induces sweating, releases the Exterior, disseminates and facilitates Lung Qi, calms wheezing, stops coughing and warms and disperses Cold pathogens.

-Xi Xin - Disperses Wind-Cold and Internal Cold and alleviates pain. With Ma Huang, for coughing and wheezing due to Phlegm caused by Wind-Cold and Wind-Cold-Damp Bi pain. \with Ma Huang and Fu Zi, for Exterior Wind-Cold with underlying Yang Deficiency.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Dang Shen, for palpitations due to Heart Qi Deficiency. With Ren Shen, relieves palpitations and anxiety.

TREATS

Sick sinus syndrome.

* ULCER #1 Formula (Dr. Joel Penner, americandragon.com)

ACTIONS - Activates the Blood. Breaks up Stasis. Strengthens the Spleen. Eliminates Dampness. Clears Heat. Increases Blood flow to the mucous membranes.

SYNDROMES - Spleen Qi Deficiency with Blood Stagnation and Heat.

CLINICAL MANIFESTATIONS - Pain that is fixed, stabbing and /or severe. Pan is worse with pressure. Dark complexion. Fixed, palpable masses. Bleeding with clots. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas,. Varicose and spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots. Spontaneous perspiration. Shortness of breath. Occasional fevers. Dyspnea. Abdominal pain and spasms due to Cold. Pain is better with warmth and pressure. Pale face or a sallow, dull complexion. Fatigue. Fidgeting. Lethargy. Dry mouth. Aversion to Cold. Frequent, clear urination. Constipation. Cold extremities. Dry throat. Hematemesis. Irritability. Carbuncles. Palpitations. Hemorrhoids. Fever with a preference for hot drinks. Dry skin.

HERBS AND ACTIONS

-Dan Shen - Activates the Blood, dispels Blood Stasis, clears Heat, soothes irritability, cools the Blood and reduces abscesses.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Hou Po - Promotes the movement of Qi in the Middle Jiao, resolves Stagnation, descends Qi, dries Dampness and transforms Phlegm.

-Sha Ren - Promotes the movement of Qi, aromatically transforms Dampness, strengthens the Spleen, stops vomiting, warms the Middle and stops diarrhea. With Hou Po, for constrained Dampness with Qi Stagnation leading to distention and fullness in the epigastrium and abdomen.

-Wu Mei - Generates fluids, alleviates thirst, expels roundworms, astringes the Intestines, stops diarrhea and alleviates pain.

-Huang Lian - Clears Heat, drains Dampness, drains Fire, resolves Fire toxicity and drains Stomach Fire. With Wu Mei, for Internal Heat with thirst, Dryness, coughing and irritability.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, activates the Blood, dispels Blood Stasis, drains pus and reduces swelling.

TREATS

Peptic, gastric and duodenal ulcers.

1.3.3.13 RT-TCM-13

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_13

BE Lotion, Dang Gui Shao Yao San, Herpes Zoster #2, Kong Xian Dan, Ming Mu Di Huang Wan #2, Obesity #4, Pertussis #1, Topical #2, Yun Pi Yi Shen Tong Du Tang

Recordings Updated in May 2025

* BE LOTION (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Fire. Resolves toxicity. Drains Damp-Heat. Reduces abscesses. Dissipates nodules.

SYNDROMES - Toxic Damp-Heat.

CLINICAL MANIFESTATIONS - Bartholinitis. Eczema.

HERBS AND ACTIONS

-Ye Ju Hua - Drains Fire and resolves toxicity.

-Zi Hua Di Ding - Clears Heat, relieves Fire toxicity and clears hot sores (Chuang Yung) internally and externally. With Ye Ju Hua, for carbuncles and other red swellings. With Pu Gong Ying, for furuncles, boils and carbuncles.

-Pu Gong Ying - Reduces abscesses, dissipates nodules, clears Heat, resolves Dampness, relieves Fire toxicity and clears Heat in the Blood.

-Long Dan - Drains Damp-Heat from the Liver and Gallbladder channels.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao, drains Fire and relieves Fire toxicity.

TREATS

Bartholinitis. Eczema.

* DANG GUI SHAO YAO SAN - 當歸芍藥散 - Dang Gui And Peony Powder

ACTIONS - Nourishes Liver Blood. Softens the Liver. Spreads Liver Qi. Strengthens the Spleen. Resolves Dampness. Reinforces the Spleen and Kidney.

SYNDROMES - Abdominal pain due to Liver and Spleen Disharmony. Abdominal pain due to Spleen and Kidney Deficiency. Hypofunction of the Liver and Spleen with Stagnation of Blood and Qi Stagnation due to Dampness. Problems with pregnancy.

CLINICAL MANIFESTATIONS - Continuous cramping pain in the abdomen. Pain is not severe. Pain is relieved by pressure. Edema of the feet. Urinary difficulty. Slight edema (primarily of the lower limbs). Symptoms generally occur during pregnancy. Pale face. Fatigue. Heaviness of head. Lassitude. Lower abdominal pain. Dizziness. Tinnitus. Lumbago. Edema. Abdominal pain with edema during pregnancy due to Blood Deficiency and abnormal water circulation. Oliguria. Palpitations. Cold feet. Extreme coldness of the hands and feet. Vertigo. Weakness and numbness of lower back and legs during pregnancy or postpartum. Mal position of the fetus. Dysmenorrhea. Irregular menstruation. Right upper quadrant pain. Hepatomegaly. Anemia. Lack of energy. Sore back. Thirst with no desire to drink.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution during pregnancy. Concurrent use of this formula with colchicine was associated with improvement in learning acquisition deficit induced by colchicine. This formula may reduce menopausal symptoms induced by gonadotropin-releasing hormone agonists without negative effects on serum estradiol levels.

NOTES - Danggui-shaoyao-san (DSS), is a famous Chinese herbal formula, which has been widely used in oriental countries for the treatment of various gynecological diseases and other diseases, including neurodegenerative disorders. Although well-

practiced in clinical medicine, the mechanisms involved in DSS for the treatment of neurodegenerative diseases remain elusive. DSS has an effect on free radical-mediated neurological diseases, possesses antioxidant capability, attenuates inflammatory reaction, and reduces cell apoptosis in the hippocampus. DSS improves the function of the dopaminergic, adrenergic, and serotonergic nervous systems. Interestingly, DSS can alleviate cognitive dysfunction of Alzheimer's disease (AD) patients, suggesting that it is a useful therapeutic agent for AD.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis for abdominal pain. With Bai Shao and Chuan Xiong, harmonizes the function of and softens the Liver. With Bai Shao, Fu Ling, Bai Zhu and Ze Xie, for diarrhea during pregnancy with severe abdominal pain.

-Bai Shao - Softens the Liver, stops pain and nourishes the Blood. With Bai Zhu, treats concurrent problems of the Liver and Spleen. With Dang Gui, nourishes Yin and Blood.

-Bai Zhu - Tonifies the Spleen, tonifies Qi and dries Dampness. With Fu Ling and Ze Xie, strengthens Spleen and leaches out Dampness.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Ze Xie - Promotes urination and resolves Dampness. With Bai Zhu, for Spleen Deficiency leading to accumulation of Dampness with urinary difficulty, loose stools, diarrhea Milky Lin or vaginal discharge.

-Chuan Xiong - Activates Blood and regulates Qi.

TREATS

Dysfunctional uterine bleeding. Menopause. Irregular menstruation. Chronic nephritis. Heart pain. Habitual miscarriage. Premature rupture of placenta. Hemorrhoids. Cystitis. Postpartum weakness. Dysmenorrhea. Monoplegia. Vascular diseases. Beriberi. Postpartum scar tissue. Mal position of fetus. Metrorrhagia. Menorrhagia. Endometritis. Pre-eclampsia. Postpartum depression. Uterine fibroids. Infertility. Urinary tract stones. Coronary artery disease. Vascular headaches. Rheumatoid arthritis. Acne. Chilblains. Psoriasis. Swellings from congestive Heart disease. Post-concussion syndrome. Meniere's disease. Tension. Hypotension. Conjunctivitis. Leukorrhea. Luteal insufficiency. Breech presentation. Adnexitis. Chloasma. Edema during pregnancy. Palpitations. Vertigo. Fatigue. Abdominal pain during pregnancy. Dizziness during

pregnancy. Chronic pelvic inflammatory disease. Hypertension during pregnancy. Perimenstrual migraines. Post abortion. Post tubal ligation. Post insertion of IUD. Post Cesarean section. Anemia. Lumbago. Edema. Abdominal pain. Abdominal pain during pregnancy. Abdominal mass which is localized and hard. Threatened miscarriage. Functional menorrhagia. Premenstrual syndrome. Chronic hepatitis. Chronic cholecystitis. Early-stage cirrhosis of the Liver. Perimenopausal syndrome. Breast hyperplasia. Chronic gastritis. Peptic ulcers. Intestinal obstruction. Gout. Trigeminal neuralgia. Sciatica. Eczema. Urticaria. Varicose veins. Renal disease. Ascites from cirrhosis. Thrombotic stroke. Allergic rhinitis. Benign prostatic hypertrophy. Appendicitis. Senile dementia. Hypo chronic anemia. Unstable pregnancy. Pelvic inflammatory disease. Beriberi. Angina pectoris. Amenorrhea. Dizziness. Weakness. Postpartum uterine bleeding. Fetal restlessness. Weakness and numbness of lower back and legs during pregnancy or postpartum.

* HERPES ZOSTER #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Invigorates the Blood. Promotes the movement of Qi. Expels Wind. Drains Heat. Relieves Fire toxicity. Cools the Blood. Alleviates pain.

SYNDROMES - Qi and Blood Stagnation of the skin with Toxic Heat.

CLINICAL MANIFESTATIONS - Slight fever. Lymph node enlargement. Local skin sensitivity and pain. Usually along one side of the body. Papular eruptions. Lymph node enlargement. Nerve pain which may be very severe and may continue after disappearance of the papules. Occurs along the nerve routes, usually of the neck, intercostals, abdomen, lower back or extremities.

HERBS AND ACTIONS

-Ding Xiang - Warms the Middle Jiao, descends Qi, warms the Kidneys, assists Yang and relieves pain.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Chai Hu and Chi Shao, for Liver Qi and Blood Stagnation generating headache and/or chest pain.

-Yu Jin - Invigorates the Blood, dispels Blood Stasis, regulates Qi flow, speeds healing of chronic sores, clears Heat, cools the Blood and alleviates pain. With Zhi Ke, for Liver Qi Stagnation with a stifling sensation in the chest and fullness in the epigastrium and abdomen with heat signs and stabbing pains in the chest, flanks and abdomen due to Blood Stagnation. With Chai Hu, for Liver Qi and Blood Stagnation with flank pain and distention.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, clears Heat, cools the Blood, reduces swelling from sores and abscesses and relieves pain.

-Chai Hu - Resolves Shao Yang disorders, reduces fever, harmonizes the Exterior and Interior, spreads Liver Qi, relieves Stagnation and disperses Wind-Heat. With Zhi Ke, for a stifling sensation in the chest, abdominal pain, poor appetite, and irregular bowel movement. With Gan Cao, for upper right quadrant pain and Wind-Heat fever.

-Ban Lan Gen - Drains Heat, relieves Fire toxicity and cools the Blood.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure and resolves hardenings.

-Gan Cao - Clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

TREATS

Herpes zoster.

* KONG XIAN DAN - 控癇丹 - Control Mucus Special Pill

ACTIONS - Dispels Phlegm and thin mucus.

SYNDROMES - Phlegm lurking above and below the diaphragm. Water retention in the chest and diaphragm.

CLINICAL MANIFESTATIONS - Sudden, excruciating and migrating pain in the thorax, neck, lower back and inguinal region. A tightening sensation in the sinews and bones that evolves into a burning, piercing pain. Cold and painful extremities. Unrelenting, severe headache. Lethargy with a desire to sleep. Anorexia. A temporary loss of taste in the mouth. Coughing up thick, greasy sputum. A rattling sound in the throat at night. Excessive salivation. Abdominal distention. Edema.

HERBS AND ACTIONS

-Gan Sui - Drains water downward, eliminates congested fluids and thin mucus and expels Phlegm.

-Jing Da Ji - Drains water downward and drives out thin mucus.

-Jie Zi - Warms the Lungs, regulates Qi and expels Phlegm.

TREATS

Obesity. Numbness. Hysteria. Edema. Paresthesia. Schizophrenia. Bi-polar disorder.

* MING MU DI HUANG WAN #2 - 明目地黄片二号 - Improve Vision With Rehmannia Pill #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Replenishes the Yin of the Liver and Kidneys. Improves vision. Disperses Wind and Heat.

SYNDROMES - Decreased acuity of vision due to Liver and Kidney Yin Deficiencies.

CLINICAL MANIFESTATIONS - Blurry vision. Dry eyes. Painful eyes. Night blindness. Excessive tearing on exposure to Wind.

HERBS AND ACTIONS

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin, benefits Jing and brightens the eyes. With Shu Di Huang, for Liver and Kidney Deficiencies. With Ju Hua, for Liver and Kidney Deficiencies with Jing and Blood unable to rise and nourish the eyes with tinnitus, headache, and visual impairment.

-Ju Hua - Disperses Wind, clears Heat, calms the Liver, clears the eyes, promotes the movement of Heart Qi and Blood and stimulates Blood circulation. With Gou Qi Zi, for Dizziness and blurred vision due to Liver and Kidney Yin Deficiencies. With Gou Qi Zi, Shu Di Huang, Mu Dan Pi and Shan Zhu Yu, for blurred vision and dizziness due to Liver and Kidney Yin Deficiency

-Bai Ji Li - Calms the Liver, anchors the Yang, Dispels Wind-Heat and brightens the eyes.

-Jue Ming Zi - Clears Liver Heat, clears the vision, benefits the eyes, calms the Liver, anchors Liver Yang and reduces blood pressure. With Ju Hua, for hypertension.

-Shu Di Huang - Tonifies the Kidneys and nourishes Jing, Yin and Blood. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu and Shan Yao, for Dizziness, weak and sore back, impotence, spermatorrhea and night sweats, due to Kidney and Liver Yin Deficiencies. With Shan Yao and Ze Xie, for ascendant Fire due to exhaustion of Kidney Yin. With Shan Zhu Yu, Shan Yao and Ze Xie, for Xiao Ke with predominant polyuria.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and astringes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty,

difficult urination with abdominal distention. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Jing and Yin and stops perspiration. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Yao, tonifies the Liver and Spleen. With Shu Di Huang and Shan Yao, for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency. With Shu Di Huang, Shan Yao and Gou Qi Zi, for true Yin Deficiency.

-Mu Dan Pi - Clears Heat, cools the Blood clears and Deficiency Fire. With Ju Hua, for dizziness and red, swollen eyes due to ascending Liver Fire. With Ze Xie, Fu Ling and Shan Zhu Yu, for spermatorrhea due to Kidney Yin Deficiency with Heat.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

TREATS

Blurry vision. Diabetes. Glaucoma. Hypertension. Weakness. Diminished vision. Ophthalmia. Ophthalmalgia. Fibromyalgia.

* OBESITY #4 (Dr. Joel Penner, americandragon.com)

ACTIONS - Boosts Qi. Tonifies the Spleen. Percolates Dampness.

SYNDROMES - Spleen Qi Deficiency.

CLINICAL MANIFESTATIONS - Obesity with a long history of a bad diet. Dislike of speaking. Sweating on exertion. Aversion to Cold. Puffy face. Poor appetite. Abdominal fullness after eating. Fatigued spirit. Weakness of the extremities. Somnolence. Loose stools. Clear, thin vaginal discharge. Bland taste in the mouth.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, promotes urination and reduces edema. With Dang Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweat. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Han Fang Ji and Bai Zhu, for Wind edema with sweating, heavy sensations of the body and aversion to Wind.

-Han Fang Ji - Promotes urination and reduces edema especially in the lower body.

-Dang Shen - Tonifies the Middle Jiao and augments Qi. With Fu Ling, for Spleen and Stomach Deficiencies with fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiencies.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ban Xia, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention and anorexia due to congested fluids.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, stops vomiting and harmonizes the Stomach. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi.

-Shan Zha - Reduces and guides out Food Stagnation, transforms accumulations, transforms Blood Stasis, invigorates Blood circulation and dissipates clumps.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Bai Zhu, for anorexia and other symptoms of Damp Obstruction due to Spleen Deficiency.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Obesity. Abdominal fullness and distention.

* PERTUSSIS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Stops cough and wheezing. Clears Heat. Descends Qi. Dissolves Phlegm.

SYNDROMES - Retention of Phlegm Fire.

CLINICAL MANIFESTATIONS - Paroxysmal gasping coughs with a strong barking sound. Thick, difficult to expectorate sputum. Noisy inhalation. Red eyes. Occasional Blood in the sputum. Vomiting of mucus.

HERBS AND ACTIONS

-Zi Su Zi - Stops cough and wheezing, descends Qi and dissolves Phlegm. With Ting Li Zi, for accumulation of Phlegm and thin mucus leading to Lung Qi Stagnation and blockage with cough and wheezing which is worse when lying down, edema of the tissues of the face and head, stifling fullness and discomfort in the chest and reduction in the flow of urine.

-Ting Li Zi - Drains the Lungs, reduces Phlegm and calms wheezing. With Da Zao, for cough with excessive sputum, wheezing, and chest pain due to Phlegm preventing the descent of Lung Qi.

-Wu Wei Zi - Astringes leakage of Lung Qi.

-Qing Meng Shi - Descends Qi and reduces Phlegm.

-Jie Geng - Opens the Lungs, spreads Lung Qi and expels Phlegm.

-Zhi Shi - Breaks up Stagnant Qi, reduces accumulation, transforms Phlegm and descends Qi.

-Gua Lou - Clears Heat, transforms Hot Phlegm, moistens Dryness and expands the chest.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi and moderates and harmonizes the harsh properties of other herbs.

TREATS

Pertussis. Whooping cough.

* TOPICAL # 2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Detoxifies.

SYNDROMES - Toxic Heat skin lesions.

CLINICAL MANIFESTATIONS - Lesions appear abruptly on the inner surface of the extremities. May affect the dorsal aspects of the hands and feet. Erythema. Blisters. Ulcerations. Itching. Maybe a moderate fever. May affect the face and neck. May affect the scrotum. Papules. Pustules. Scabs. Indistinct borders.

HERBS AND ACTIONS

-Ban Lan Gen - Drains Heat, relieves Fire toxicity and cools the Blood.

-Da Qing Ye - Clears Heat, resolves Fire toxicity, cools the Blood and dissipates

maculae.

-Huang Bai - Drains Fire and relieves Fire toxicity.

-Shi Gao - Heals eczema, burns and ulcerated sores and wounds topically or internally. With Qing Dai and Huang Bai, for eczema, burns and abscesses.

-Hua Shi - Absorbs Dampness and clears Heat topically. With Huang Bai and Shi Gao, topically as a powder for eczema and other damp skin lesions.

TREATS

Bartholinitis. Eczema

* YUN PI YI SHEN TONG DU TANG (Prof. Chengping Wen)

ACTIONS - Strengthen spleen. Nourish kidney. Dredge governor vessel.

NOTES - Traditional Chinese Medicine (TCM) has been served as complementary medicine for Ankylosing Spondylitis (AS) treatment for a long time. Yun-Pi-Yi-Shen-Tong-Du-Tang (Y-Y-T) is a novel empirical formula designed by Prof. Chengping Wen. Clinical evidence demonstrated that Y-Y-T is beneficial for AS patients in relieving clinical symptoms and enhancing physical quality.

HERBS

-Chuan Shan Long - Dispels Wind and eliminates Dampness. Invigorates the Blood, unblocks the collaterals and relaxes the sinews. Transforms Phlegm and alleviates cough.

-Cang Zhu - Dispels Wind and eliminates Dampness. Invigorates the Blood, unblocks the collaterals and relaxes the sinews. Transforms Phlegm and alleviates cough.

-Tu Fu Ling - Relieves toxicity and eliminates Dampness (benefits the joints). Clears Damp-Heat from the skin. Promotes normal urination (dispels Heat from the Lower Jiao).

-Jin Yin Hua - Clears Heat and resolves Fire toxicity. Vents and disperses External Wind-Heat. Clears Damp-Heat from the Lower Jiao. Cools the Blood and stops bleeding (charred).

-Niu Xi - Invigorates the Blood and expels Blood Stasis. Nourishes Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints. Descends Blood and Fire. Clears Damp-Heat in the Lower Jiao.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain and reduces swelling. Generates flesh and promotes healing.

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain. Reduces swellings, induces ulceration and dispels putrefication. Treats unconsciousness caused by Phlegm Stagnation.

-Huang Qi - Tonifies Qi and Blood. Strengthens the Spleen and raises the Yang Qi of the Spleen and Stomach. Tonifies Wei Qi, stabilizes the Exterior and tonifies the Lungs (aids the circulation of moisture downward from the face). Promotes urination and reduces edema. Promotes the discharge of pus, generates flesh and expels toxins. Generates Body. Fluids. Relieves numbness and pain.

-Gan Cao - Tonifies the Spleen and augments Qi. Moistens the Lungs, resolves Phlegm and stops coughing. Moderates spasms and alleviates pain. Clears Heat and relieves Fire toxicity. Antidote for many toxic substances (internal and topical). Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Cu San Leng - (Cu San Leng substiutes Shui Zhi of the original formula) Forcefully breaks up Blood Stasis, regulates Qi and alleviates pain. Dissolves accumulations. Regulates menstruation. Promotes lactation.

-Huang Lian - Clears Heat and drains Dampness. Drains Fire and resolves Fire toxicity. Clears Heat and stops bleeding. Clears Heat topically. Clears Heart Fire (sedative). Drains Stomach Fire.

TREATS

Ankylosing Spondylitis.

1.3.3.14 RT-TCM-14

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_14

Dan Shen Huo Xue Tang, Dao Qi Tang, Fang Ji Huang Qi Tang, Jiao Gui Tang, Jin Huang San (Gao), Ling Gui Zhu Gan Tang, Long Dan Xie Gan Tang, Qing Ying Jie Yu Tang, Yi Qi Huo Xue

Recordings Updated in May 2025

* DAN SHEN HUO XUE TANG - 丹参活血汤 - Red Sage Root Decoction For Promoting Blood Circulation

ACTIONS - Tonifies Qi and Blood. Invigorates the Blood. Dispels Blood Stasis. Expels Wind-Dampness. Relaxes the sinews and bones.

SYNDROMES - Blood Stagnation.

CLINICAL MANIFESTATIONS - The local skin of the affected area is dark purple in color. There are some hard cord-like subcutaneous swollen masses which are not painful when they are pressed. Coldness. Numbness. Pain.

HERBS AND ACTIONS

-Dan Shen - Invigorates the Blood and dispels Blood Stasis.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat and cools the Blood.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Huang Qi, for many Blood Deficiency and Qi and Blood patterns. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Ji Xue Teng - Invigorates and tonifies the Blood, invigorates the channels and relaxes the sinews. With Sang Ji Sheng and Niu Xi, for Wind-Damp Bi, especially chronic painful obstruction in women and the elderly where there is also Blood Deficiency.

-Sang Ji Sheng - Tonifies Liver and Kidney Yin, strengthens the sinews and bones and expels Wind-Dampness.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin, strengthens the sinews and bones, benefits the joints and Clears Damp-Heat in the Lower Jiao.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis.

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain. With Dang Gui, for Qi and Blood Deficiencies with chronic non-healing sores, numbness, painful obstruction and paresthesias.

-Yu Jin - Invigorates Blood, dispels Blood Stasis, regulates Qi flow, speeds healing of chronic sores and alleviates pain. With Dan Shen, for Heat with Blood Stasis causing chest Bi.

TREATS

Chronic phlebitis.

* DAO QI TANG - 导气汤 - Conduct The Qi Decoction

ACTIONS - Promotes the movement of Qi. Spreads Liver Qi. Scatters Cold. Alleviates hernial pain.

SYNDROMES - Cold-type Shan Qi (bulging disorders - hernias). Foxy Shan Qi.

CLINICAL MANIFESTATIONS - Cold Type Shan Qi: A swollen, firm, cold, retracted scrotum or testicles. Severe: A stone-like hardness. Testicular pain that improves with warmth. Intolerance of Cold. Foxy Shan Qi: A part of the Small Intestine intermittently descends into the groin or scrotum through the inguinal canal. It disappears when the patient lies flat or when manually reduced. It reappears when the patient stands, coughs or sneezes. It may be large or small, changing from time to time. There may or may not be pain radiating to the testes.

HERBS AND ACTIONS

-Chuan Lian Zi - Dredges Liver Qi, releases Stagnation, stops pain. With Xiao Hui Xiang, strongly stops pain and regulates Qi to treat bulging disorders and mobile masses in the lower abdomen. With Xiao Hui Xiang and Wu Zhu Yu, for pain associated with hernia. With Xiao Hui Xiang, Wu Zhu Yu and Mu Xiang, for hernial disorders with lower abdominal pain and distention due to Cold.

-Mu Xiang - Promotes the movement of Qi, alleviates pain, adjusts and regulates stagnant Qi in the Intestines, strengthens the Spleen, prevents Stagnation and harmonizes the Liver and Spleen.

-Xiao Hui Xiang - Warms the Liver and Kidneys, expels Cold, alleviates pain, regulates Qi and harmonizes the Stomach.

-Wu Zhu Yu - Warms the Middle Jiao, disperses Cold, warms the Spleen, promotes the movement of Qi and alleviates pain.

TREATS

Hernia.

* FANG JI HUANG QI TANG - 防己黄芪汤 - Stephania And Astragalus Formula

ACTIONS - Augments Qi. Strengthens the Spleen. Releases the Exterior. Promotes urination. Reduces edema. Regulates water circulation.

SYNDROMES - Wind-Damp Edema. Wind-Damp (no edema). Wind-Damp Bi. Wind-Damp Accumulation with Wei Qi Deficiency (Lung and Spleen Qi Deficiency)

CLINICAL MANIFESTATIONS - Sweating. Aversion to Wind. Heavy sensation in the body. Superficial edema. Urinary difficulty. Knee pain. Abdominal bloating. Edema in lower legs. Fatigue. Edema in women with constitutional Deficiency.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with acute Excess type edema. Contraindicated for those with Dampness Obstructing the Protective Yang. Overdose can cause nausea and anorexia.

HERBS AND ACTIONS

-Huang Qi - Strengthens the Spleen, tonifies Qi, tonifies Wei Qi, stabilizes the exterior, promotes urination and reduces edema. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Fang Ji, for Wind edema with numbness, pain, swelling of the face and extremities, sweating, sensitivity to Wind, and reduced urination.

-Fang Ji - Promotes urination and reduces edema (especially in the lower body), expels Wind-Dampness and alleviates pain. With Huang Qi and Bai Zhu, for Wind-Dampness invasion with Wei Qi Deficiency causing superficial edema, heaviness of the body, and sweating.

-Bai Zhu - Tonifies the Spleen, tonifies Qi, dries Dampness, stabilizes the exterior and stops sweat.

-Gan Cao - Tonifies the Spleen, tonifies Qi and moderates and harmonizes the properties of other herbs.

-Sheng Jiang - Releases the exterior, warms the Middle and adjusts the Ying and Wei. With Da Zao, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen, protects Stomach Qi and reduces irritation of the Gastrointestinal tract by other herbs.

-Da Zao - Strengthens the Spleen, tonifies Qi and moderates and harmonizes the harsh properties of other herbs.

TREATS

Rheumatic Heart disease. Ascites. Acute glomerulonephritis. Chronic nephritis. Dysuria. Cardiac edema. Nephritic edema. Ephidrosis. Periarthritis of the shoulder. Hydronephrosis. Edema in the legs. Perspiration. Arthritis. Low back pain. Fatigue.

Arthralgia. Obesity. Testicular hydrocele. Oliguria. Arthralgia in knees. Irregular menstruation. Rheumatism. Rheumatoid arthritis. Muscle pain. Lumbar disc disease. Bone fractures. Idiopathic edema. Hydrocele. Hircismus. Knee pain. Edema. Strangury.

* JIAO GUI TANG - 椒桂汤 - Sichuan Pepper And Cinnamon Decoction

ACTIONS - Warms the Liver channel. Disperses Cold. Regulates Qi. Stops pain.

SYNDROMES - Excess Cold.

CLINICAL MANIFESTATIONS - A swollen, firm, cold, retracted scrotum or testicles. Severe: A stone-like hardness. Testicular pain that improves with warmth. Intolerance of Cold.

HERBS AND ACTIONS

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, Warms the Middle, releases the muscle layer, warms the channels and collaterals to relieve pain, unblocks Yang, transforms Qi Warms and facilitates the flow of Blood through the vessels.

-Hua Jiao - Warms the Middle Jiao, disperses Cold and alleviates pain.

-Gao Liang Jiang - Warms the Middle Jiao and alleviates pain. With Xiao Hui Xiang, for abdominal hernial pain.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Qing Pi, for intercostal pain due to Qi obstruction in the Liver channel.

-Xiao Hui Xiang - Warms the Liver and Kidneys, expels Cold, alleviates pain, regulates Qi and harmonizes the Stomach.

-Chen Pi - Regulates Qi, adjusts the Middle and relieves the diaphragm. With Qing Pi, for flank pain and chest and abdominal distention due to Liver Qi Stagnation.

-Wu Zhu Yu - Warms the Middle Jiao, disperses Cold, promotes the movement of Qi and alleviates pain.

-Qing Pi - Spreads Liver Qi and breaks up Stagnant Qi. With Chai Hu, restores the Qi circulation between the Upper and Lower Jiaos to treat long-term Qi Stagnation moving to Blood Stasis with fixed pain and occasional palpable lumps.

TREATS

Hernia.

* JIN HUANG SAN (GAO) - 金黃散 - Golden Yellow Powder (Topical). Ru Yi Jin Huang San 如意金黃散. As You Desire Golden Yellow Powder

ACTIONS - Clears Heat. Resolves toxins. Dispels Dampness. Transforms Phlegm. Eliminates Blood Stasis. Reduces swelling.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Red, hot swellings that have not come to a head. They often will be painful, burning and itchy.

HERBS AND ACTIONS

-Tian Hua Fen - Relieves toxicity, expels pus and reduces swelling.

-Huang Bai - Drains Fire and relieves Fire toxicity. With Cang Zhu, eliminates Dampness and clears Heat for Damp-Heat sores.

-Da Huang - Invigorates the Blood, dispels Blood Stasis, clears Heat, reduces Fire toxicity and eliminates Phlegm.

-Jiang Huang - Invigorates Blood, eliminates Blood Stasis, promotes the movement of Qi, opens the channels and collaterals to alleviate pain and reduces swelling. With Da Huang and Bai Zhi, topically for swelling , and pain during the early stages of sores. With Da Huang, Tian Hua Fen and Bai Zhi, for sores and lesions.

-Bai Zhi - Reduces swelling, eliminates toxins and expels pus.

-Hou Po - Promotes the movement of Qi downward, dries Dampness and transforms Phlegm. With Cang Zhu and Chen Pi, for Dampness Accumulation with Qi Stagnation.

-Chen Pi - Regulates Qi, dries Dampness and transforms Phlegm.

-Cang Zhu - Strongly dries Dampness.

-Tian Nan Xing - Dries Dampness, expels Phlegm, reduces swelling and alleviates pain.

-Gan Cao - Clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

TREATS

Carbuncles. Boils. Insect bites. Poison oak. Early stage boils or summer boils, presenting as red swelling, itching, burning pain, and a short root. Abscesses. Contact

dermatitis. Trauma (such as sprains). Deep-set toxic sores. Furunculosis (multiple boils occurring at the same time or with repeated occurrences), which often occur on the neck, back, and hip. Furuncles. Acute Phelgmon (especially with edema). Nasal furuncles. Herpes associated with AIDS/HIV. Acute lymphangitis. Acute lymphadenitis. Acute pyogenic parotitis. Acute mastitis. Epididymitis. Cold injury (e.g. with red-swelling, burning pain). Poison ivy. Burns. Herpes zoster. Chronic ulcers (early stage with red-swelling, burning pain, or with fluid flowing out and itching.) Cyst of the sebaceous glands. Folliculitis. Swellings from trauma. Erysipelas. Acne vulgaris.

* LING GUI ZHU GAN TANG - 苓桂朮甘湯 - Poria, Cinnamon Twig, Atractylodes And Licorice Decoction - Atractylodes And Hoelen Formula

ACTIONS - Warms and transforms Phlegm and congested Fluids. Strengthens the Spleen. Resolves Dampness. Improves metabolic function.

SYNDROMES - Heart Yang Not Vigorous: Water Qi Insults the Heart with Lung and Spleen Qi Deficiency. Congested Fluids in the epigastrium. Phlegm Stagnation due to Spleen Yang Deficiency. Tan Yin. Injury from Cold due to improper use of purgatives or emetics.

CLINICAL MANIFESTATIONS - Fullness in the chest and hypochondrium. Palpitations. Shortness of breath. Coughing up clear, watery sputum. Dizziness. Vertigo (when standing). Dyspnea. Anxiety. Tinnitus. Nausea/Vomiting. Difficult urination. Mild edema. Cold feet. Headache. Migraine. Weak abdomen.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with congested Fluids due to Damp-Heat. Contraindicated for those with Yin Deficiency or Body Fluid Insufficiency patterns. Contraindicated for those with Liver Yang Rising patterns.

HERBS AND ACTIONS

-Fu Ling - Strengthens the Spleen, drains Dampness, harmonizes the Middle Jiao and transforms Phlegm. With Gui Zhi, warms and transforms Fluids, unblocks Yang and promotes urination. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Gui Zhi and Bai Zhu, for Dampness Obstruction causing Lin syndrome, edema, heaviness of the body, and irritability. With Gan Cao, for Spleen and Heart Deficiency causing facial edema, palpitations, and shortness of breath.

-Gui Zhi - Warms the Yang, disperses Cold and helps to resolve congested fluids and descends rebellious Qi. With Gan Cao, for palpitations and shortness of breath due to injured Yang of the chest. With Fu Ling, unblocks the Yang and facilitates the removal of congested fluids associated with Yang Deficiency edema. With Fu Ling, Bi Zhu and Gan Cao, for Phlegm accumulation with dizziness, fullness in the chest and hypochondrium, vertigo and palpitations.

-Bai Zhu - Strengthens the transformative and transportive functions of the Spleen and dries Damp. With Fu Ling and Gui Zhi, for Spleen Deficiency with chest distention and edema. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Gan Cao - Augments Middle Jiao Qi,resolves Phlegm and strengthens the Spleen and moderates and harmonizes the harsh properties of other herbs.

TREATS

Meniere's disease. Neurosis. Rheumatoid arthritis. Chronic nephritis. Chronic gastritis. Chronic gastroenteritis. Chronic bronchitis. Bronchial asthma. Pulmonary emphysema. COPD. Cardiac edema. Nephritic edema. Hyperpnea. Dysuria. Neurasthenia. Instability of the autonomic nervous system. Coronary Heart disease. Cor pulmonale. Myocarditis. Gastroptosis. Functional Stomach disorders. Pleurisy. Central serous retinopathy. Renal calculus. Pediatric inguinal hernia. Pediatric rhinitis. Motor dysfunction. Hydronephrosis. Polyhydramnios. Keshan disease. Migraine. Muscle Bi. Obesity. Palpitations. Headache. Dizziness. Multiple sclerosis. Morning sickness. Myalgic encephalomyelitis. Epstein-Barr virus syndrome. Cirrhosis of the Liver. Anorexia. Fatigue. Pyelonephritis. Dyspnea. Ulcerative colitis. Vomiting associated with AIDS/HIV. Motion sickness. Valvular disease. Cardiac asthma. Basedow's disease. Viral conjunctivitis. Chronic optic nerve disorders. Optic nerve atrophy. Nebulae. Anasarca. Renal atrophy. Hypertension. Hypotension. Sinusitis. Anemia. Rhinitis. Flushing up due to water poisoning. Basilar insufficiency. Mitral valve prolapse. Pericardial effusion. Peptic ulcer. Pertussis. Cataracts. Nephritis. Ascites. Chronic renal failure. Hydrocele. Nephrotic syndrome. Anxiety. Hysteria. Vegetative nerve disturbance. Skin Bi. Cardiac arrhythmia. Acid reflux. Cough. Vertigo. Hay fever. Nausea/Vomiting. Chronic fatigue syndrome. Cholecystitis. Tinnitus. Weakness. Edema. Congestive Heart failure. Indigestion. Excessive amniotic fluid. Abdominal fullness and distention.

* LONG DAN XIE GAN TANG - 龙胆泻肝汤 - Gentiana Longdancao Decoction To Drain The Liver. Gentiana Combination. Decoction to Purge Liver Fire with Gentiana

ACTIONS - Drains Excess Fire from the Liver and Gallbladder. Clears and Drains Damp-Heat from the Lower Jiao. Clears Damp-Heat from the San Jiao.

SYNDROMES - Liver Fire Flaring Up. Damp-Heat in the Liver and Gallbladder. Damp-Heat in the Liver Channel. San Jiao Damp-Heat.

CLINICAL MANIFESTATIONS - Hypochondriac pain. Headache. Dizziness. Red sore eyes. Hearing loss. Swelling in the ears. Bitter taste in the mouth. Irritability. Short temper. Difficult and painful urination with a heat sensation in the urethra. Swollen and itchy genitalia. Yellow, foul smelling leukorrhea. Short menstrual cycle with reddish-purple blood. Ear discharge. Yellow urine. Chest pain. Constipation. Turbid urine. Dry throat. Hematuria. Pain in the armpits. Sweating in the groin.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen and Stomach Deficiency Cold. Contraindicated for those with Yin, Yang or Blood Deficiency. Contraindicated for long-term use.

HERBS AND ACTIONS

-Long Dan - Drains Shi Heat from the Liver/Gallbladder, drains Liver Fire and eliminates Damp-Heat from Lower Jiao. With Chai Hu and Huang Qin, for Liver/ Gallbladder Damp-Heat.

-Huang Qin - Drains Fire, dries Dampness and calms ascending Liver Yang. With Zhi Zi, drains Fire and eliminates Dampness.

-Zhi Zi - Clears Heat, eliminates irritability and drains Damp-Heat. With Huang Qin, drains Fire and eliminates Dampness.

-Mu Tong - Promotes urination. With Che Qian Zi and Ze Xie, drains Heat from Upper Jiao and eliminates Damp-Heat from Lower Jiao through the urine.

-Che Qian Zi - Promotes urination and clears Heat.

-Ze Xie - Promotes urination and clears Damp Heat.

-Chai Hu - Disperses Heat due to Liver/Gallbladder Qi Stagnation and focuses the actions of the formula on Liver/Gallbladder. (Omitted in some versions). With Huang Qin, clears Shao Yang Heat. With Gan Cao, for hepatitis and upper right quadrant pain.

-Di Huang - Nourishes Yin and clears Heat. With Dang Gui, protects Yin and Blood.

-Dang Gui - Nourishes Blood without causing Stasis. With Di Huang, protects Yin and Blood.

-Gan Cao - Harmonizes the Middle Jiao and regulates other herbs.

TREATS

Migraine headache. Viral hepatitis. Eczema. Intercostal neuralgia. Gallstones. Uveitis. Conjunctivitis. Corneal ulcers. Acute glaucoma. Central retinitis. Acute suppurative otitis media. Herpes zoster (initial stage). Herpes simplex (early stages). Herpes genitalia. Pyelonephritis. Cystitis. Urethritis. Pelvic inflammatory disease. Orchitis. Epididymitis. Hyperthyroidism. Endometritis. Meniere's disease. Jaundice. Vaginal inflammation. Vaginal itch. Obesity. Headache. Epistaxis. Nebula. Hemoptysis. Alopecia. Dysentery. Acute gastritis. Hiccups. Vertigo. Senile pruritis. Acute tonsillitis. Hematochezia. Acute pyogenic infection of the perineum. Abdominal pain with dysuria. Acute pyogenic infection of the penis. Hematuria. AIDS/HIV. Dizziness. Bi-Polar disorder. Asthma.

Syphilis. Constipation. Fibrocystic breast disease. Acute icteric hepatitis. Systemic lupus erythematosis. Nephritis. Gonorrhea. Leukemia. Bartholinitis. Polycystic ovary syndrome. Fallopian tube infection. Uterine prolapse. Cervicitis. Allergic rhinitis. Diabetes mellitus. Atopic dermatitis. Mania. Anxiety neurosis. Stress-related breathing problems. Myalgic encephalomyelitis. Schizophrenia. Psychosis. Tinnitus. Deafness. Acute pancreatitis. Anorexia. Menopause syndrome. Premenstrual syndrome. Hematemesis. Drug-induced dermatitis. Palpitations. Short menstruation. Rectal prolapse. Indigestion. Metrorrhagia. Neck pain and stiffness. Dysmenorrhea. Herpes associated with AIDS/HIV. Hangover. Sore throat. Hepatitis C. Chronic tonsillitis. Leukorrhea. Optic neuritis. Venereal ulcer. Groin lymphadenitis. Genital eczema. Boils and carbuncles of the vestibular and external auditory canal. Hypertension. Swollen eyelids. Eye pain. Acute prostatitis. Scrotal eczema. Scrotal abscess. Acute cholecystitis. Acute pyelitis. Encephalitis B. Chronic viral infections. Culosis. Psoriasis. Viral dermatosis. Genital inflammation and swelling. Perineal itching in women. Perineal infection. Furuncle of the vestibulus nasi. Rosacea. Prostatitis. Vaginal pain. Insomnia. Infertility. Keratitis. Acne vulgaris. Common warts. Soft warts. Cough. Dizziness. Otitis media. Chancre. Oliguria. Trigeminal neuralgia. Lacrimation. Vertigo. Mania-depression. Fever. Nausea/Vomiting. Sperm abnormality. Behcet's disease. Cirrhosis of the Liver. Upper gastrointestinal bleeding. Urinary tract infection. Shingles. Syphilis. Male sexual dysfunction. Spermatorrhea. Erysipelas. Endometriosis. Ovaritis. Mastitis. Abnormal vaginal discharge. Oral lichen planus. Sciatica. Prostatic hypertrophy. Boils. Hysteria. Chronic Fatigue Immune Deficiency Syndrome. Epstein-Barr virus syndrome. Impotence. Stress. Chronic pancreatitis. Depression. Allergic purpura. Thrombocytopenic purpura. Fatigue. Enuresis. Hernia. Liver cancer. Oral leukoplakia. Thrush. Otorrhea. Subarachnoid hemorrhage. Cervical polyps. Urolithiasis. Pruritis associated with AIDS/HIV. Vaginitis.

* QING YING JIE YU TANG - 清營解瘀汤 - Clear The Nutritive Level And Break Up Stagnation Decoction

ACTIONS - Clears Heat. Cools the Blood. Invigorates the Blood. Dispels Stasis.

SYNDROMES - Heart Blood Stagnation With Heat.

CLINICAL MANIFESTATIONS - Pain, swelling and obvious tenderness in the superficial veins along the limbs or the thoracoepigastric walls. Hard cord-like swollen masses may be felt. Palpitations. Stabbing pain in the anterior region over the Heart. Suffocating sensation in chest. Maybe drawing pain down internal aspect of arm (especially left arm). Pain (in chest and/or arm) tends to be severe and intermittent. Thirst with a desire for cold drinks. Irritability, irascibility. Feeling of Heat and disturbance in the Heart. Insomnia. Flushed face. Bitter taste in mouth.

HERBS AND ACTIONS

-Yi Mu Cao - Invigorates the Blood and dispels Stasis.

-Zi Cao - Clears Heat, cools the Blood and invigorates Blood circulation.

-Zi Hua Di Ding - Clears Heat and relieves Fire toxicity.

-Bai Shao - Nourishes the Blood, calms Liver Yang and Liver Wind and alleviates pain.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, invigorates the Blood and dispels Blood Stasis.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Acute thrombotic phlebitis.

* YI QI HUO XUE Recipe - YQHXR - (Shanghai TCM-integrated Hospital)

ACTIONS - Anti-fibrotic.

CLINICAL MANIFESTATIONS - Skin fibrosis. Dermal thickening. Systemic sclerosis.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood. Strengthens the Spleen and raises the Yang Qi of the Spleen and Stomach. Tonifies Wei Qi, stabilizes the Exterior and tonifies the Lungs (aids the circulation of moisture downward from the face). Promotes urination and reduces edema. Promotes the discharge of pus, generates flesh and expels toxins. Generates Body Fluids. Relieves numbness and pain.

-Dan Shen - Invigorates the Blood and dispels Blood Stasis. Clears Heat and soothes irritability. Cools the Blood and reduces abscesses. Nourishes the Blood and calms the Spirit.

-Dang Gui - Tonifies the Blood and regulates the menses. Invigorates and harmonizes the Blood and disperses Cold (stops pain due to Blood Stasis). Moistens the Intestines and unblocks the bowels. Reduces swelling, expels pus, generates flesh and alleviates pain. Stops coughing and treats dyspnea.

-Ji Xue Teng - Invigorates and tonifies the Blood. Activates the channels and relaxes the sinews.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. Moistens the Intestines and unblocks the bowels. Drains abscesses.

-Ji Xue Cao - Clears Heat, promotes diuresis, resolves swelling and removes toxicity. Invigorates the Blood, reduces swelling and stops pain. Clears Damp-Heat. Cools the Blood and stops bleeding. Clears the Liver and brightens the eyes.

-Ling Zhi - Tonifies Heart Qi, nourishes Heart Blood and calms the Spirit. Tonifies the Lung Qi, transforms Phlegm and stops cough and wheezing. Tonifies Qi and nourishes Blood.

-Yin Yang Huo - Tonifies the Kidneys, strengthens Yang and increases the libido. Dispels Wind-Cold-Dampness and warms and unblocks the flow of Yang Qi (strengthens the sinews and bones.)

-Fu Ling - Promotes urination and leaches out Dampness. Strengthens the Spleen and harmonizes the Middle Jiao. Strengthens the Spleen. Quiets the Heart, calms the Spirit and soothes the nerves.

-Gan Cao - Tonifies the Spleen and augments Qi. Moistens the Lungs, resolves Phlegm and stops coughing. Moderates spasms and alleviates pain. Clears Heat and relieves Fire toxicity. Antidote for many toxic substances (internal and topical). Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels

TREATS

Systemic Sclerosis.

1.3.3.15 RT-TCM-15

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_15

Ba Xian Chang Shou Wan, Gui Zhi Jia Ge Gen Tang, Huang Lian Wen Dan Tang, Li Zhong Tang, Ma Huang Tang, Qing Dai Gao, Wu Mei Wan, Yi Guan Jian, Zhen Wu Tang

Recordings Updated in May 2025

* BA XIAN CHANG SHOU WAN - 八仙長壽丸 - Eight Immortal Pill For Longevity. Mai Wei Di Huang Wan. The Longevity Pill. Ophiopogonis, Schisandra and Pills of Six Herbs with Rehmannia

ACTIONS - Enriches Yin. Nourishes the Essence of the Kidneys and Lungs. Nourishes Liver Yin. Astringes Lung Qi. Resolves Phlegm. Stops asthma.

SYNDROMES - Lung and Kidney Yin Deficiency. Yin Deficiency in older patients. Kidney Yin Deficiency. Heart and Kidney Yin Deficiency. Liver and Kidney Yin Deficiency.

CLINICAL MANIFESTATIONS - Low back, knees and legs painful and weak. Foot pain. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five Sole Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Dry skin. Deafness. Steaming bones. Tidal fevers. Loose teeth. Cough. Cough with Blood. Impotence. Shortness of breath. Frequent urination. Weakness in the lower body. Hemoptysis. Dripping urine. Thirst. Dry tongue. Numbness and weakness at the waist and knees. Heel pain. Dry mouth. Blurred vision. Asthma. Hot flashes. Nocturnal emissions. Urinary incontinence. Spontaneous and nocturnal emissions. Spermatorrhea. Night sweats. Lusterless complexion. Wan complexion. Generalized weakness and fatigue. Lack of appetite. Phlegm. Maybe decreased urination.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen Deficiency type diarrhea and indigestion. Contraindicated for those with Yang Deficiency with a white greasy tongue coat.

HERBS AND ACTIONS

-Mai Dong - Moistens the Lungs, stops cough, nourishes Stomach Yin, generates fluids, clears the Heart, eliminates irritability and moistens the Intestines.

-Wu Wei Zi - Astringes leakage of Lung Qi, tonifies Qi, astringes Jing, nourishes Kidney Yin, stops diarrhea, astringes sweat, generates fluids, tonifies the Heart and calms the Spirit. With Shu Di Huang, Shan Zhu Yu and Shan Yao, for Lung and Kidney Deficiencies with cough and wheezing.

-Shu Di Huang - Tonifies the Kidneys and Nourishes Yin and Blood. With Shan Yao and Ze Xie, for ascendant Fire due to exhaustion of Kidney Yin. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu, Mu Dan Pi, Fu Ling and Ze Xie, for Liver and Kidney Yin Deficiencies. With Shan Zhu Yu, Shan Yao and Ze Xie, for Xiao Ke with predominant polyuria.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops perspiration. With Shan Yao, tonifies Liver and Spleen. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiencies of the Liver and Kidneys.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats. With Wu Wei Zi and Mai Men

Dong, for Lung Deficiency with cough.

-Fu Ling - Strengthens the Spleen and drains Dampness.

-Mu Dan Pi - Clears Heat and Deficiency Fire.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

TREATS

Neurasthenia. Pulmonary tuberculosis. Diabetes mellitus. Chronic nephritis. Hyperthyroidism. Chronic glomerulonephritis. Spermatorrhea. Chronic urinary tract infection. Hypertension. Failure to thrive. Functional uterine bleeding. Optic neuritis. Optic nerve atrophy. Central retinitis. Nephroatrophy. Senility. Impotence. Esophageal cancer. Chronic asthma. Bronchitis. Side effects of steroids. Chronic bronchitis. Heel pain. Cough. Chronic obstructive pulmonary disease (COPD). Deafness. Knee pain. Hoarseness. Hot flashes. Dyspnea. Dry skin. Foot pain. Allergic disorders. Bronchiaesthenia. Chronic urticaria. Chronic hepatitis. Nocturnal emissions. Irregular menstruation. Addison's disease. Heart failure. Sore throat. Dry mouth. Retarded growth in children. Toothache. Vegetative nerve functional disturbance. Arteriosclerosis. Amenorrhea. Scanty menstruation. Infantile dysplasia. Infantile malnutrition. Menopause. Neurasthenia. Hemoptysis. Laryngitis. Nephrotic syndrome. Oliguria. Hyperglycemia. Tinnitus. Low back pain. Weakness. Loss of voice. Night sweats. Bronchiectasis. Urinary incontinence.

* GUI ZHI JIA GE GEN TANG - 桂枝加葛根汤 - Cinnamon Twig Decoction Plus Kudzu. Cinnamon Combination plus kudzu

ACTIONS - Releases Wind-Cold from the muscle layer. Relaxes and moistens the sinews. Regulates the Ying and Wei.

SYNDROMES - Wind-Cold Attacking the Exterior with Deficiency of Ying and Wei with neck and shoulder stiffness and pain. Tai Yang Zhong Feng with neck and shoulder stiffness and pain.

CLINICAL MANIFESTATIONS - Neck pain and stiffness. Inhibited side to side turning. Fever and chills unrelieved by sweating. Decreased body resistance. Spontaneous perspiration. Rhinitis. Maybe body aches. Dry heaves. Headache. Muscles of the neck and back are very stiff and rigid. Aversion to Wind. Nasal congestion. No thirst.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Exterior Cold with Interior Heat. Use caution during the summer or spells of hot

weather. Contraindicated for those with Wind-Cold without Ying Wei disharmony.

HERBS AND ACTIONS

-Gui Zhi - Releases the exterior, adjusts the Ying and Wei, warms the channels and collaterals to relieve pain, disperses Cold, unblocks Yang, transforms Qi and releases the muscle layer. With Bai Shao, harmonizes the Ying and Wei and warms and tonifies the Middle Jiao.

-Bai Shao - Astringes the Yin and adjusts the Ying and Wei.

-Sheng Jiang - Helps release the exterior, treats nausea and vomiting. strengthens the spreading and mobilizing actions of the other herbs and adjusts the Ying and Wei. With Gan Cao, harmonizes and regulates the Spleen and Stomach. With Da Zao, regulates disharmony between the Ying and Wei. and benefits the Middle Qi.

-Ge Gen - Clears Heat, disperses Wind, releases the muscles (especially of the neck and upper back) and relieves sinus congestion.

-Da Zao - Helps Bai Shao regulate the Ying and Wei. With Gan Cao, tonifies and harmonizes the Middle Jiao.

-Gan Cao - Resolves Phlegm, stops cough, clears Heat and moderates and harmonizes the harsh properties of the other herbs.

TREATS

Common cold. Fever. Upper respiratory tract infection. Rheumatism. Conjunctivitis. Neck pain and stiffness. Upper back pain and stiffness. Middle back pain and stiffness. Shoulder stiffness in the elderly. Influenza. Postpartum fever. Allergic rhinitis. Angioedema. Cough. Bronchitis. Spontaneous perspiration. Cerebrovascular spasm. Eczema. Urticaria. Morning sickness. Frostbite. Tinea. Neuralgia. Abdominal pain due to chills. Eclampsia. Neurasthenia. Nasal obstruction. Pneumonia. Cervical spondylosis.

* HUANG LIAN WEN DAN TANG - 黃連溫膽湯 - Warm Gallbladder Decoction With Coptis. Coptis Decoction for a Warm Gallbladder

ACTIONS - Regulates Qi. Transforms Phlegm. Clears the Gallbladder. Harmonizes the Stomach. Clears Heat.

SYNDROMES - Phlegm-Fire Disturbs the Heart. Gallbladder Deficiency Heat. Disharmony Between the Gallbladder and Stomach with Severe Phlegm Heat. Qi Level Gallbladder Damp-Heat. Toxic Dampness.

CLINICAL MANIFESTATIONS - Dizziness. Vertigo. Nausea and vomiting. Insomnia.

Dream-disturbed sleep with unusual dreams. Palpitations. Anxiety. Profuse white foamy sputum. Restlessness. Timidity. Indecisiveness. Indeterminate gnawing hunger. Seizures accompanied by copious sputum. Chest distention. Expectoration of yellow Phlegm. Bitter taste in the mouth. Chills and fever. Abdominal distention. Frequent dark, scanty urine. Irritability. Depression. Slight thirst. Anorexia after serious illness.

NOTES - This formula treats the same conditions as Wen Dan Tang, but with more severe Heat including more restlessness, irritability and a more intense bitter taste.

HERBS AND ACTIONS

-Zhu Ru - Clears Heat and Phlegm from the Gallbladder and Stomach, cools Blood and descends rebellious Qi. With Ban Xia and Zhi Shi, for insomnia, palpitations and irritability due to Phlegm Heat leading to disharmony between the Gallbladder and Stomach with a stifling sensation in the chest and restlessness. With Ban Xia, Chen Pi and Huang Lian, for Phlegm-Heat in the Stomach with a stifling feeling in the epigastrium and vomiting. With Zhi Shi, for Phlegm-Heat obstructing the flow of Qi with focal distention in the chest and epigastrium, hiccup, dry retching, nausea and acid regurgitation and palpitations, irritability, insomnia and emotional problems due to Gallbladder constraint with Phlegm Disturbing the Heart. With Ban Xia, Chen Pi, Zhi Shi and Fu Ling, for Gallbladder Fire with Phlegm.

-Zhi Shi - Reduces accumulation, descends Qi, transforms Phlegm and reduces distention. With Chen Pi, strengthens the Middle Jiao.

-Ban Xia - Transforms Phlegm, descends rebellious Qi, harmonizes ST and stops vomiting. With Chen Pi, for Spleen and Stomach Qi Disharmony with epigastric and abdominal distention or pain. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools, treats Phlegm, thin mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach. With Huang Lian and Zhu Ru, for vomiting from Stomach Heat.

-Chen Pi - Regulates Qi, tonifies the Spleen, transforms Phlegm and descends Qi. With Ban Xia, for excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Sheng Jiang, for manifestations of Stomach Qi Disharmony and Cold-Dampness Obstructing the Middle with nausea and hiccup. With Zhu Ru and Huang Lian, for Phlegm-Heat induced vomiting. With Ban Xia, Zhu Ru and Sheng Jiang, for nausea and vomiting due to rebellious Stomach Qi.

-Fu Ling - Resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Gan Cao, strengthens the Spleen, drains Dampness, harmonizes the Middle Jiao and calms the Shen. With Chen Pi, for nausea and vomiting due to congested Fluids. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness

and distention, and anorexia due to congested fluids. With Ban Xia, Chen Pi and Sheng Jiang, for Congested fluids in the Stomach causing nausea and vomiting.

-Gan Cao - Resolves Phlegm, clears Heat, tonifies the Spleen and harmonizes and moderates the harsh properties of the other herbs.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, protects the Stomach and moderates and harmonizes the harsh properties of other herbs. With Sheng Jian, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen.

-Sheng Jiang - Regulates the relationship between the Gallbladder and the Stomach and assists in stopping vomiting. With Da Zao, protects the Stomach Qi. With Zhi Ban Xia, for vomiting due to Cold, Thin Mucus. With Zhu Ru, for vomiting due to Heat in patients with Stomach Qi Deficiency. With Zhu Ru and Huang Lian, for vomiting due to Heat. With Chen Pi, for Cold-Dampness Obstructing the Middle with nausea and hiccup.

-Huang Lian -Clears Heart Heat and calms the Shen.

TREATS

Chronic gastritis. Peptic ulcer. Chronic hepatitis. Neurosis. Early stages of schizophrenia. Psychosis. Meniere's disease. Chronic bronchitis. Hypertension. Myocarditis. Pericarditis. Morning sickness. Depression. Sequelae of stroke. Stroke. Male menopause. Epilepsy. Nephropathy. Diabetic retinopathy. Diabetic foot. Organophosphorus poisoning. Labyrinthitis. Vegetative nervous dysfunction with palpitations. Insomnia. Trigeminal neuralgia. Abdominal fullness and distention. Palpitations. Spermatorrhea. Gastroptosis. Hysteria. Side effects of chemotherapy. Manic depression. Acute or chronic tracheitis. Pulmonary emphysema. Asthma. Timidity. Angina pectoris. Premature atrial contractions. Cholecystitis. Severe insomnia. Autonomic dystonia. Alopecia. Tinnitus. Melancholia. Diabetes mellitus. Pneumonia. Hyperthyroidism with insomnia. Vestibular neuronitis with dizziness. Prostatitis. Premenstrual syndrome. Kidney failure (uremia). Bronchitis. Mania. Headache. Nocturnal emission. Dyspnea. Subarachnoid hemorrhage.

* LI ZHONG TANG (WAN) - 李中汤 - Decoction To Regulate The Middle. Ren Shen Tang. Ginseng and Ginger Combination. Regulate the Center Decoction (Pill)

ACTIONS - Warms the Middle Jiao. Dispels Cold. Strengthens the Spleen and Stomach. Tonifies Qi.

SYNDROMES - Spleen Yang Deficiency. Stomach Cold. Small Intestine Deficiency Cold. Middle Jiao Yang Deficiency. Tai Yin Shi (Spleen and Kidney Yang Deficiency - Pulse Slow and tight). Tai Yin Xu (abdominal pain). Sudden turmoil disorder (marked by absence of thirst). Painful Obstruction in chest due to Upper Jiao Yang Deficiency. Cold in chest during recovery from chronic illness (causes spitting of fluids). Loss of Blood

due to Spleen Yang Deficiency. Chronic childhood convulsions.

CLINICAL MANIFESTATIONS - Diarrhea with watery stools. Nausea and vomiting. No thirst. Anorexia. Abdominal and/or epigastric fullness (likes pressure). Abdominal pain. Gastrointestinal weakness. Pale face. Frequent urination. Tends toward fatigue. May have cold limbs. May have headache with fever. Body aches. Epistaxis. Hematemesis. Shortness of breath. Lassitude. Epigastric pain. All Blood from bleeding is pale. Maybe scanty urine with edema. Edema. Insomnia. Hemoptysis. Intestinal bleeding. Chronic bleeding. Hemafecia. Uterine bleeding. Rectal bleeding. Profuse menstrual flow. Chest fullness and pain. Hypochondriac pain that shoots toward the Heart. Intolerance of Cold. Rigid focal distention in the Heart region. Excessive production or drooling of foamy saliva. Emaciation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with External Wind Invasion with fever. Contraindicated for those with Yin Deficiency. Use with caution during pregnancy. For those with sudden turmoil disorder, stop when diarrhea and vomiting have stopped.

HERBS AND ACTIONS

-Gan Jiang - Warms the Spleen and Stomach and eliminates interior Cold. With Gan Cao, for vomiting and epigastric pain due to Spleen and Stomach Deficiency Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency.

-Ren Shen - Reinforces Yang, strongly tonifies Yuan Qi and harmonizes the Middle Jiao. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Bai Zhu - Strengthens the Spleen and dries Dampness. With Ren Shen, tonifies the Spleen and Stomach. With Ren Shen and Gan Jiang, for Middle Jiao Deficiency Cold with abdominal pain, distention, vomiting and diarrhea.

-Gan Cao - Augments the Qi of the Middle Jiao and harmonizes.

TREATS

Acute or chronic gastritis. Acute or chronic gastroenteritis. Gastric weakness. Gastric or duodenal ulcers. Gastroptosis. Irritable bowel syndrome. Chronic colitis. Candidiasis. Chronic bronchitis. Obstruction of the chest. Oral herpes. Functional uterine bleeding. Gastrectasis. Cholera. Fright in children with vomiting. Anemia. Excessive salivation. Stomatitis. Enteritis. Nephropathy. Obesity. Headache. Hypothyroidism. Abdominal fullness and distention. Menorrhagia. Crohn's disease. Oliguria. Neonatal jaundice. AIDS/HIV. Thrush. Breast cancer. Myasthenia gravis. Neurasthenia. Polycystic Kidneys. Stroke. Chronic glomerulonephritis. Knee pain. Celiac disease. Fatigue. Edema. Post-menopausal uterine bleeding. Ulcerative colitis. Vomiting associated with AIDS/HIV. Nausea/Vomiting. Epistaxis. Diarrhea. Tapeworm. Dyspepsia. Mild labor pains. Intoxication. Diabetes. Shoulder ache. Hemoptysis. Chilled feet. Intestinal bleeding.

Hemorrhoidal bleeding. Vaginal discharge. Sneezing of a common cold. Chronic childhood convulsions. Angina pectoris. Sudden turmoil disorder. Bacterial dysentery. Male infertility. Acid reflux. Insomnia. Hiccups. Endometriosis. Colitis. Stomach cancer. Polyuria. Asthma. Alzheimer's disease. Stomatitis. Morning sickness. Abdominal pain. Renal tuberculosis. Diabetic nephropathy. Hepatitis C. Low back pain. Anorexia. Weakness. Hematemesis. Dyspnea. Chronic bacillary dysentery. Cirrhosis of the Liver.

* MA HUANG TANG - 麻黃湯 - Ephedra Decoction. Ephedra Decoction. Ma Huang Combination

ACTIONS - Disperses Wind-Cold. Stops Asthma. Clears the Lungs.

SYNDROMES - Wind-Cold Attacks the Lungs. Tai Yang Shang Han. Wind-Cold Bi - Initial Stage.

CLINICAL MANIFESTATIONS - Itching or tickling in the throat. Wheezing. Sneezing. Gasping. Cough with expectoration of thin, watery or frothy white sputum. General body aches. No thirst. Dyspnea. Headache. Chills with low grade fever. Maybe asthma. Intolerance of Cold. Anhidrosis. Blocked and/or runny nose with watery nasal discharge. Chest discomfort. Neck stiffness.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Lin Syndrome. Contraindicated for those with Yin Deficiency bleeding. Contraindicated for those with bacterial infections (Heat). Contraindicated for those with skin infections. Contraindicated for those with Wind-Heat. Contraindicated for those with a weak pulse. Contraindicated for those with debility. Contraindicated for those with copious urination. Use caution for those with hypertension. Avoid profuse perspiration. Use only for short periods of time.

NOTES - This formula may reduce the adverse effects of interferon in hepatitis C patients.

HERBS AND ACTIONS

-Ma Huang - Strongly promotes diaphoresis, relieves the Exterior, disperses Lung Qi, promotes urination and expels Cold. With Gui Zhi, for Wind-Cold Excess with fever, chills and anhidrosis and Wind-Cold-Damp Bi. With Xing Ren, for cough and wheezing due to Wind-Cold Attacks the Lungs.

-Gui Zhi - Promotes diaphoresis, warms the channels, disperses Cold, releases the exterior, assists the Yang, adjusts the Ying and Wei, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels and releases the muscle layer. With Gan Cao, for palpitations and shortness of breath due to injured Yang of the chest.

-Xing Ren - Disperses Lung Qi, resolves Phlegm and stops cough and wheezing. With Ma Huang and Gan Cao, for cough with profuse sputum, nasal obstruction and a hoarse voice.

-Gan Cao - Tonifies Qi, resolves Phlegm, stops cough and moderates and harmonizes the harsh properties of other herbs. With Ma Huang and Xing Ren, for Wind-Cold Attacks the Lungs with coughing and/or wheezing.

TREATS

Bronchial asthma. Common cold. Rheumatoid arthritis (inflammation intense but short lived). Rhinitis. Acute glomerulonephritis. Infantile enuresis. Painful menstruation. Abdominal masses. Acute pharyngitis. Early stages of mastitis. Lumbar strain. Periarthritis of the shoulder. Raynaud's disease. Trigeminal neuralgia. Sinusitis. Asthma. Chronic obstructive pulmonary disease (COPD). Pericardial effusions. Urticaria. Glomerulonephritis. Benign prostatic hypertrophy (BPH). Phlebitis. Peripheral neuropathy. Epistaxis. Cough. Numbness. Nasal congestion. Allergic sinusitis. Acute nephritis. Toothache. Whole body pain. Sore throat. Upper respiratory tract infection. Influenza. Acute bronchitis. Lobar pneumonia. Allergies. Wind-Cold nosebleeds. Difficult labor. Pelvic inflammatory disease. Otitis media. Traumatic arthropathy. Cervical spine disease. Ankylosing spondylitis. Sciatica. Migraine. Scleroderma. Hay fever. Eczema. Chilblains. Pyelonephritis. Ascites. Solar dermatitis. Enuresis. Headache. Painful obstruction. Pediatric psoriasis. Pulmonary emphysema. Paresthesia. Fever. Allergic rhinitis. Gasping. Dyspnea. Neck pain and stiffness. Nasal pain.

* QING DAI GAO -青黛膏 - Indigo Naturalis Ointment (Topical)

ACTIONS - Relieves inflammation. Stops itching. Clears Heat. Dispels toxins. Absorbs serous fluid.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Papular erythema, may be ulcerated. Rough, thickened skin. Desquamation. Severe itch. Scarlatina-like erythema. Measle-like erythema. Vesicles. Urticaria. Lichenification. Pigment sedimentation with a distinct border. Fixed erythema. Multiform erythema. Suppuration. Epidemolytic erythema.

HERBS AND ACTIONS

-Qing Dai - Clears Heat, resolves Fire toxicity, cools the Blood, disperses Stagnation and reduces swelling internally or topically.

-Huang Bai - Drains Fire and relieves Fire toxicity.

-Hua Shi - Absorbs Dampness and clears Heat topically. With Huang Bai and Shi Gao, topically as a powder for eczema and other damp skin lesions.

-Shi Gao - Heals eczema, burns and ulcerated sores and wounds topically or internally. With Qing Dai and Huang Bai, for eczema, burns and abscesses.

TREATS

Eczema. Cracked nipple. Allergic dermatitis (including poison ivy). Exfoliative dermatitis. Nasal vestibulitis. Lupus erythematosus. Urticaria. Erythema multiforme. Dermatitis (if a crust has formed). Dermatitis medicamentosa. Lacquer rash. Atopic dermatitis. Parasites. Seborrheic dermatitis. Erythema nodosum. Herpes associated with AIDS/HIV.

* WU MEI WAN - 烏梅丸 - Mume Pill. Mume Formula. Mume Elixir, Wu Mei Dan. Mume Stomach Pacifying Pill Wu Mei An Wei Wan. Anti-parasitic Mume Pill Sha Chong Wu Mei Wan. Stomach Pacifying Pill An Wei Wan

ACTIONS - Warms the Internal organs. Warms the Middle Jiao. Warms the Intestines. Drains Heat. Replenishes Qi. Dispels parasites. Calms roundworms. Drains the Liver. Calms the Stomach. Promotes Blood circulation. Relieves pain.

SYNDROMES - Collapse from roundworms. Jue Yin Stage Cold and Heat. Chronic diarrhea or dysentery. Stomach Heat with Kidney Deficiency.

CLINICAL MANIFESTATIONS - Intermittent attacks of abdominal pain. Stifling sensation in the chest and epigastrium. A sensation of warmth in the chest and epigastrium. Irritability in the chest and epigastrium. Vomiting after eating. Extremely Cold extremities. Vomiting of roundworms. Incessant diarrhea. Hunger with no desire to eat. Vomiting immediately after eating. Heat in the Stomach with Cold in the Intestines. Bitter taste in the mouth. Frequent urination. Anxiety. Abdominal pain (better with warmth and pressure). Pain beneath the Heart. Borborygmus. Unquenchable thirst. Running piglet Qi. Pain and Heat in the Stomach. Discharge of small amounts of pus. Irritability. Recurrent nausea and vomiting. Diarrhea. Dry throat. Turbid urine. Polydipsia.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with explosive diarrhea. Contraindicated for those with Damp-Heat dysentery. Use with caution during pregnancy.

HERBS AND ACTIONS

-Wu Mei - Eliminates roundworms and alleviates pain. With Chuan Jiao, Xi Xin and Gan Jing, for roundworms causing abdominal pain, irritability, and vomiting after eating. With Huang Lian, for Internal Heat with thirst, Dryness, cough and irritability.

-Hua Jiao - Warms the Middle Jiao, disperses Cold, relieves diarrhea, kills parasites and

alleviates abdominal pain. With Xi Xin, expels parasites, Warms the organs. with Wu Mei and Huang Lian, for abdominal pain and vomiting due to roundworms, especially in cases of Deficiency Cold.

-Xi Xin- Disperses Wind-Cold and Internal Cold and alleviates pain. With Gui Zhi, facilitates the flow of Yang Qi.

-Huang Lian - Clears Heat and drains Dampness. With Huang Bai, attacks worms.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao.

-Gan Jiang - Warms the Middle and expels Cold. With Fu Zi and Gui Zhi, warms the interior and disperses Internal Cold. With Huang Lian, for epigastric pain and distention, dysentery, indeterminate gnawing hunger, vague abdominal pain or discomfort, belching, and nausea.

-Fu Zi - Disperses Cold and Dampness, warms the channels and stops pain. With Ren Shen, for severe Deficiency of the Source Qi and Collapse of Yang with cold extremities, sweating, weak breathing, dizziness, and an extremely pale complexion. With Xi Xin, for Cold damage both Internal and External with aversion to Cold, headache and generalized body aches with aching joints.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain.

-Ren Shen - Powerfully tonifies Yuan Qi and Spleen and Stomach Qi. With Dang Gui, tonifies Qi and nourishes Blood, preventing injury to normal Qi.

-Dang Gui - Tonifies Blood, regulates the menses, invigorates and harmonizes the Blood and disperses Cold. With Gui Zhi and Xi Xin, for patients with Blood Deficiency who experience cold extremities due to Cold entering the channels.

TREATS

Ascariasis. Biliary ascariasis. Intestinal ascariasis. Ascariasis in children. Roundworms in the bile duct. Hookworms. Chronic gastroenteritis. Post-gastrectomy syndrome. Colitis. Bacterial dysentery. Chronic bacillary dysentery. Functional gastric disorders. Neurogenic vomiting. Corneal ulcers. Glaucoma. Meniere's disease. Chronic pelvic inflammatory disease. Primary dysmenorrhea. Neurogenic headache. Autonomic dystonia. Hysterical psychosis. Asthma. Pneumonia. Headache. Endometriosis. Jaundice. Fever. Abdominal pain. Edema. Ulcerative colitis. Chyluria. Gastritis. Schistosomiasis. Chronic diarrhea. Indigestion. Gastric or peptic ulcer. Irritable bowel syndrome. Intestinal colic. Neurosis. Insomnia. Cholelithiasis. Cholecystitis. Keratitis. Aphthous ulcers. Chronic suppurative otitis media. Morning sickness. Dysfunctional uterine bleeding. Hypertension. The sequelae of meningitis or encephalitis. Vitiligo. Sick sinus syndrome. Diabetes. Recalcitrant hiccups. Gastralgia. Uterine fibroids. Diarrhea

as a complication of AIDS/HIV. Nausea/Vomiting. Anorexia. Temporomandibular joint syndrome (TMJ).

* YI GUAN JIAN - 貫煎 - Linking Decoction. The Liver Reinforcing Decoction

ACTIONS - Enriches Kidney and Liver Yin. Spreads Liver Qi.

SYNDROMES - Liver Yin Deficiency. Liver and Kidney Yin Deficiency (with Liver Qi Stagnation). Liver and Kidney Yin Deficiency with abdominal masses.

CLINICAL MANIFESTATIONS - Hypochondriac and chest pain. Dry, parched mouth and throat. Bitter taste in mouth. Acid regurgitation. Dizziness. Epigastric and abdominal distention. Maybe constipation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with chest pain due to Phlegm or Phlegm-Damp Retention.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood and nourishes the Yin and Blood. With Gou Qi Zi, softens the Liver by nourishing the Blood and Kidney Yin. With Mai Dong and Sha Shen, for dry mouth, thirst and a red tongue due to Stomach Yin Deficiency.

-Gou Qi Zi - Nourishes and tonifies the Liver and Kidneys, and nourishes the Blood and Yin. With Dang Gui, Sha Shen, and Chuan Lian Zi, for Yin Deficiency with Qi Stagnation with epigastric and flank pain, dry mouth and throat, a bitter taste and acid regurgitation.

-Sha Shen - Nourishes the Stomach and Lung Yin. With Mai Dong, enriches and nourishes Stomach and Lung Yin, protects against Liver attacking the Stomach and Lung, treats parched mouth and throat and helps soften the Liver.

-Mai Dong - Nourishes the Stomach and Lung Yin. With Sha Shen, for a dry throat, constipation, thirst and a red tongue with little coat due to pathogenic Warmth or Heat injuring the Stomach Yin or long-term Yin Deficiency.

-Dang Gui - Nourishes and invigorates the Blood.

-Chuan Lian Zi - Disperses Liver Qi, alleviates pain and clears Heat. With Di Huang and Gou Qi Zi, for hypochondriac and chest pain, dry mouth and acid regurgitation from Liver Qi Stagnation along with Liver and Kidney Yin Deficiency.

TREATS

Menstrual disorders. Hernia. Hiatus hernia. Lung consumption. Diabetes mellitus. Abdominal masses. Certain stages of some warm febrile diseases. Chronic hepatitis.

Chronic cirrhosis of the Liver. Elevated Liver enzymes. Costochondritis. Peptic ulcer. Essential hypertension. Chronic gastritis. Pleuritis. Premenstrual syndrome. Perimenopause syndrome. Hyperthyroidism. Knee pain. Headache. Irregular menstruation. Coronary Heart disease. Dizziness. Anemia. Fever during the late stage of Liver cancer. Behcet's disease. Menopause syndrome. Panic attacks. Tinnitus. Acid reflux. Deafness. Forgetfulness. Abdominal pain. Dysmenorrhea. Flaccid paralysis. Late menstruation. Spermatorrhea. Urinary tract infection. Dry skin. AIDS/HIV/ARC. Sore throat. Chronic glomerulonephritis. Testitis. Wasting and thirsting. Hypertension during pregnancy. Addison's disease. Thrombocytopenic purpura. Pulmonary tuberculosis. Chronic orchitis. Neurasthenia. Gastric and duodenal ulcer. Gastrointestinal neurosis. Hypochondriac neuralgia. Early menstruation. Cholecystitis. Intercostal neuritis. Tourette syndrome. Amenorrhea. Breast tenderness. Retinitis pigmentosa. Insomnia. Irritable bowel syndrome. Cough. Meniere's disease. Parkinson's disease. Constipation. Tidal fever. Depression. Anxiety neurosis. Low-grade fever. Abdominal fullness and distention. Neurosis. Low back pain. Weakness. Colitis. Male menopause. Night sweats. Scanty menstruation. Ascites. Sjogren's Syndrome. Systemic lupus erythematosus. Tongue pain.

* ZHEN WU TANG - 真武湯 - True Warrior Decoction - Vitality Combination. Vitality (Vital Energy) Combination

ACTIONS - Warms Yang. Promotes urination.

SYNDROMES - Heart Yang Not Vigorous: Water Qi Insults the Heart with Kidney Yang Deficiency. Kidney Yang Deficiency with Water Flooding. Kidney Yang Deficiency with Water Flooding the Lungs. Spleen and Kidney Yang Deficiency with Water Flooding. Tai Yang moving to Shao Yin Cold. Tai Yang Shang Han with sweating that does not reduce the fever. Jin Ye (Body Fluid) Stasis.

CLINICAL MANIFESTATIONS - Abdominal pain aggravated by Cold. Urinary difficulty. Deep, aching heaviness in the extremities. Generalized edema. Loose stools. Dizziness. Heavy sensation in the head. Palpitations. Cough. Epigastric palpitations. Aversion to Cold. Watery diarrhea. No thirst. Leukorrhea. Hiccup. Profuse perspiration. Cold limbs. Headaches. A husky voice. Hair loss. Asthma. Generalized twitching. Tidal flushing of the genitals by Dampness. Water buildup leading to hernia. Impotence. Prone to infections. Prone to allergies. Prone to Wind erysipelas. Diarrhea. Constipation. Chest pain. Mental and emotional disorders. Light-headedness. Nasal obstruction with clear mucus. Impaired visual acuity. Prone to dormant papules. A sensation of something being stuck in the throat. Incessant sneezing. Swelling and pain of the teeth or gums. Feeling of unsteadiness as if one were about to fall. Distended or heavy sensation of the head. Gradual weight gain. Dyspnea. Abdominal distention and fullness. Pitting edema. Scanty urination or. Frequent, clear, abundant urination at night. Chills. Weak knees. Seminal emissions. Flaccid abdomen. Muscular aching. Chronic lower back pain. Nausea. Cyclic vomiting. Fever, perspiration does not reduce fever. Vertigo. Impaired memory. Shivering and trembling. Catches cold easily. Severe fatigue.

Aches and pains in the body or extremities. Flank pain. Wheezing.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Heat conditions. Contraindicated for those with water accumulation due only to Excess conditions.

NOTES - This formula promotes circulation and metabolism.

HERBS AND ACTIONS

-Fu Zi - Restores Kidney and Spleen Yang. With Bai Zhu, for Spleen Yang Deficiency with a cold, painful abdomen, vomiting and watery diarrhea. With Bai Zhu and Fu Ling, for Kidney and Spleen Yang Deficiency with retention of pathogenic water with abdominal pain, which is worse with Cold, urinary difficulty, and deep aching and heaviness in the extremities. With Fu Ling, for lower body edema and dysuria.

-Bai Zhu - Tonifies the Spleen and dries Dampness. With Fu Ling, strengthens the Spleen and promotes urination. With Sheng Jiang and Fu Ling, reinforces Earth to control Water to treat edema with Kidney Yang Deficiency .

-Fu Ling - Drains Dampness and strengthens the Spleen. With Fu Zi and Sheng Jiang, for edema due to Spleen and Kidney Yang Deficiency.

-Sheng Jiang - Spreads Lung Qi, warms the Stomach, disperses Cold, stops coughing and vomiting, and warms and dispels edema.

-Bai Shao - Preserves Yin, stops abdominal pain and relaxes spasms.

TREATS

Chronic glomerulonephritis. Nephritis. Dizziness. Common cold. Rheumatic valvular Heart disease. Influenza. Congestive Heart failure. Cirrhosis of the Liver. Chronic hepatic disorders. Ascites. Edema. Chronic enteritis. Intestinal tuberculosis. Chronic diarrhea. Meniere's disease. Primary hypertension. Primary hyperaldosteronism. Hypothyroidism. Rheumatoid arthritis with joint effusion. Carbon monoxide poisoning. Post-concussion syndrome. Post concussion headache. Sciatica. Restless legs. Piriformis syndrome. Essential tremors. Allergic rhinitis. Chronic sinusitis. Leukorrhea. Uterine prolapse. Arrhythmia. Palpitations. Chronic eczema. Cough. Coronary Heart disease. Abdominal pain. Dysmenorrhea. Infertility. Hypothyroidism. Dysentery. Polyuria. Emphysema. Cyclic vomiting. Systemic lupus erythematosis. Chronic fatigue syndrome. Crohn's disease. Low back pain. Forgetfulness. Fatigue. Edema during pregnancy. Obesity. Profuse perspiration. Dyspnea. Constipation. Painful obstruction. Chronic bronchitis. Insomnia. Amenorrhea. Cor pulmonare. Asthma. Chronic obstructive pulmonary disease (COPD). Trigeminal neuralgia. Basilar insufficiency. Pleurisy. Neurasthenia. Cerebral bleeding. Indigestion. Gastroptosis. Chronic peritonitis. Renal atrophy. Monoplegia. Pruritis. Renal edema. Chronic renal failure. Benign prostatic

hypertrophy. Prostatitis. Benign prostatic hypertrophy. Cardiac edema. Pneumonia. Hypopituitarism. Chronic gastroenteritis. Chronic pelvic inflammatory disease with effusion. Osteoarthritis. Lumbar disc disease. Facial tics. Scrotal eczema. Infertility. Nephrotic syndrome. Alopecia. Irritable bowel syndrome. Postpartum pain. Endometriosis. Raynaud's disease. Vertigo. Abdominal fullness and distention. Oliguria. Nausea/Vomiting. Celiac disease. Diarrhea. Anorexia. Hypotension. Weakness. Impotence. Anxiety. Spermatorrhea. Shoulder pain. Upper back pain. Thrombophlebitis.

1.3.3.16 RT-TCM-16

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_16

Fungus #1, Hei Xiao Yao San, Huang Qi Jian Zhong Tang, Jin Shui Liu Jun Jian, Shu Qi Huo Xue Tang, Xiao Qing Long Tang, Xing Ren Hua Shi Tang, Zhi Bai Di Huang Wan, Zhi Mei Jing Yin Sai Ji

Recordings Updated in May 2025

* FUNGUS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Resolves Fire-toxicity. Expels Wind. Dries Dampness. Clears Damp-Heat. Stops itching.

SYNDROMES - Damp-Heat.

CLINICAL MANIFESTATIONS - Fungus infection.

HERBS AND ACTIONS

-Bai Xian Pi - Clears Heat, resolves Fire-toxicity, expels Wind, dries Dampness, Clears Damp-Heat and stops itching. With Ku Shen, for Damp-Heat sores that itch.

-Ku Shen - Clears Heat, dries Dampness, disperses Wind, kills parasites and stops itching.

-Bai Ji Li - Dispels Wind and stops itching.

TREATS

Fungus infection. Eczema.

* HEI XIAO YAO SAN - 黑逍遙散 - Black Rambling Powder

ACTIONS - Pacifies the Liver. Spreads Liver Qi. Strengthens the Spleen. Nourishes the Blood. Harmonizes the Liver and Spleen.

SYNDROMES - Liver Qi Stagnation Invades Stomach. Liver Qi Stagnation Invades the Spleen (Liver and Spleen Disharmony). Liver Qi Stagnation with Blood Deficiency. Qi and Blood Stagnation. Blood Deficiency with fatigue. Disharmony between the Ying and Wei with Phlegm, cough, tidal fever and wasting of limbs which may lead to Bone Steaming. Gu Syndrome.

CLINICAL MANIFESTATIONS - Hypochondriac pain. Headache. Vertigo. Bitter taste in the mouth. Dizziness. Frequent sighing. Epigastric pain and distention. Flatulence. Dry mouth and throat. Fatigue. Anorexia. Alternating chills and fever. Irregular menstruation. Breast distention. Lassitude. Insomnia. Shoulder and back pain. Rib pain. Various types of menstrual discharges. Premenstrual cramps. Excessive menstrual bleeding. Tightness or fullness in the chest. Cold extremities. Pain in the arms and legs. Heaviness of the head. Night sweats. Bloating and pain at the umbilicus and abdomen. Diarrhea alternating with constipation. Five Sole heat. Palpitations. Malar flush. Depression. Irritability. Increased desire to sleep. Flatulence.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution during pregnancy. Use with caution for those with Qi Stagnation with underlying Liver and Kidney Yin Deficiency.

NOTES - This formula treats the same conditions as Xiao Yao Wan but with more severe Blood Deficiency.

HERBS AND ACTIONS

-Chai Hu - Relieves Liver Qi Stagnation, pacifies the Liver, relieves the Shao Yang and reduces fever. With Bo He, for depression, a stifling sensation in the chest and irregular menstruation due to Liver Blood Deficiency with Stagnation.

-Dang Gui - Nourishes the Blood, regulates menses and invigorates and harmonizes the Blood. With Bai Shao, nourishes Blood and eases anxiety due to Liver Stagnation.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and fills the Marrow. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Bai Shao - Calms Liver Yang, alleviates pain, nourishes Blood and regulates menstruation. With Chai Hu, for flank pain due to Liver Qi Stagnation.

-Bai Zhu - Tonifies the Spleen and tonifies Qi. With Fu Ling, strengthens the Spleen and

resolves Dampness.

-Fu Ling - Strengthens the Spleen and harmonizes the Middle Jiao.

-Gan Cao - Tonifies Spleen Qi, stops pain and harmonizes the other herbs. With Bai Shao, moderates spasmodic abdominal pain.

-Bo He - Relieves Liver Qi Stagnation, disperses stagnant Heat and enhances Chai Hu's ability to relieve the Liver. With Bai Shao and Chai Hu, for chest and flank distention due to Liver Qi Stagnation.

-Sheng Jiang - Harmonizes, prevents rebellious Qi and normalizes the flow of Qi at the center.

-Zhi Shi - Enhance Chai Hu's function of dispersing the Liver.

TREATS

Chronic hepatitis. Pleurisy. Chronic gastritis. Peptic ulcer. Anemia. Functional uterine bleeding. Menopausal syndrome. Pelvic inflammatory disease. Fibrocystic breasts. Neurasthenia. Optic nerve atrophy. Optic neuritis. Central retinitis. Glaucoma. Acute retrobulbar neuritis. Stress. Meniere's disease. Candidiasis. Acid reflux. Amenorrhea. Headache. Enteritis. Vertigo. Numbness. AIDS/HIV. Nausea. Gu syndrome. Anorexia. Hypotension. Fatigue. Morning sickness. Night sweats. Late menstruation. Liver cancer. Shoulder pain. Middle back pain. Cortical blindness. Nervousness in women. Leukorrhea. Delayed menstruation. Irregular menstruation. Insomnia. Breast distention. Epstein Barr. Chronic Fatigue Immune Deficiency Syndrome (CFIDS). Premenstrual syndrome (from ovulation to 1st day). Premenstrual syndrome with breast distention. Hyperthyroidism. Hepatitis. Leaky gut syndrome. Giardiasis. Tuberculosis. Irritable bowel syndrome. Dizziness. Dysmenorrhea. Paresthesia. Bi-polar disorder. Vomiting. Fever. Stress. Palpitations. Hypertension. Male menopause. Gastroenteritis. Menorrhagia. Scanty menstruation. Indigestion. Constipation. Cirrhosis of the Liver.

* HUANG QI JIAN ZHONG TANG - 黃耆建中湯 - Astragalus Decoction to Construct the Middle. Astragalus Combination. Astragalus Build the Center Decoction. Decoction of Astragalus seu Hedysari for Warming the Middle Jiao

ACTIONS - Warms and tonifies the Spleen and Stomach. Replenishes Qi. Harmonizes the Interior. Alleviates pain

SYNDROMES - Stomach Qi Deficiency. Spleen Yang Deficiency. Deficiency Cold of the Middle Jiao with severe Qi Deficiency. Wei Qi Deficiency

CLINICAL MANIFESTATIONS - Spontaneous perspiration. Shortness of breath. Occasional fevers. Dyspnea. Abdominal pain and spasms due to Cold. Pain is better

with warmth and pressure. Pale face or a sallow, dull complexion. Fatigue. Fidgeting. Lethargy. Dry mouth. Aversion to Cold. Frequent, clear urination. Constipation. Cold extremities. Dry throat. Hematemesis. Irritability. Carbuncles. Palpitations. Hemorrhoids. Fever with a preference for hot drinks. Dry skin.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Eliminate sweet flavor for vomiting from roundworms. Contraindicated for those with Heat from Yin Deficiency. Modify for abdominal distention.

HERBS AND ACTIONS

-Huang Qi - Replenishes Qi, stops perspiration, consolidates Wei, strengthens the Spleen and raises Spleen Yang.
With Gui Zhi, for Qi, Blood, Ying and Wei Deficiencies.

-Yi Tang - Tonifies Spleen and Stomach, alleviates Cold pain and moderates spasmodic abdominal pain.
With Gui Zhi, warms and tonifies the Middle Jiao. With Gui Zhi and Gan Cao, for Middle Jiao Deficiency Cold with abdominal pain. With and Huang Qi, for spleen Deficiency. With Huang Qi, for abdominal pain due to Qi Deficiency.

-Gui Zhi - Warms the Middle Jiao, disperses Cold, releases the exterior, adjusts the Ying and Wei and warms the channels and collaterals to relieve pain. With Bai Shao, harmonizes the Ying and Wei and warms and tonifies the Middle Jiao.

-Bai Shao - Nourishes Blood, regulates menstruation and adjusts the Ying and Wei. With Gan Cao, stops spasmodic abdominal pain. With Yi Tang, Gui Zhi, Sheng Jiang and Gan Cao, for abdominal pain due to Cold from Middle Jiao Deficiency which is better with pressure and somewhat alleviated by eating. With Huang Qi, Gui Zhi, Sheng Jiang and Da Zao for Bi syndrome. With Gui Zhi, Yi Tang, Da Zao, Gan Cao and Sheng Jiang, for severe epigastric or abdominal pain or cramps caused by the Liver overacting on the Deficient, Cold Middle Jiao.

-Gan Cao - Tonifies the Spleen, tonifies Qi, moderates spasms. and moderates and harmonizes the properties of other herbs.

-Sheng Jiang - Releases the exterior, disperses Cold, warms the Middle, stops vomiting and adjusts the Ying and Wei. With Da Zao, harmonizes and protects the Ying and Wei.

-Da Zao - Strengthens the Spleen, tonifies Qi and moderates and harmonizes the harsh properties of other herbs.
With Sheng Jiang, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen.

TREATS

Gastric ulcer. Gastralgia. Chronic gastritis. Gastroptosis. Antral gastritis. Atrophic gastritis. Duodenal ulcer. Suppurative swellings. Neurasthenia. Chronic hepatitis. Aplastic anemia. Pernicious anemia. Irritable bowel syndrome. Allergic rhinitis. Delayed healing of wounds. Leukemia. Hemolytic jaundice. Dysmenorrhea. Chronic dysentery. Polyuria. AIDS/HIV. Abdominal pain. Stress. Hemorrhoids. Fatigue. Vaginal discharge. Palpitations. Rectal prolapse. Strangury. Otorrhea. Urinary incontinence. Inflammatory bowel syndrome. Postpartum fever. Delicate constitution in children. Night sweats. Weakness during convalescence. Chronic otitis media. Chronic ulcerations. Gangrene. Colitis. Anorexia. Leukopenia. Lead poisoning. Hypoglycemia. Yin Jaundice. Prolapse of the gastric mucosa. Pulmonary tuberculosis. Ancylostomiasis. Endometriosis. Stomach cancer. Jaundice. Constipation. Diarrhea. Chronic pancreatitis. Hematemesis. Impotence. Male menopause. Spontaneous perspiration. Indigestion. Dyspnea. Dry skin. Cirrhosis of the Liver.

* JIN SHUI LIU JUN JIAN - 金水六君煎 - Six-gentlemen Of Metal And Water Decoction. Dang Gui, Rehmannia and Six Herbs Combination

ACTIONS - Enriches and moistens the Lungs and Kidneys. Regulates and promotes Qi. Dispels Dampness. Harmonizes the Middle Jiao. Transforms Phlegm.

SYNDROMES - Damp-Phlegm due to Lung and Kidney Yin Deficiency.

CLINICAL MANIFESTATIONS - Copious white, thick sputum. Sputum is difficult to expectorate. Sputum may have a salty taste. Throat parched. Cough. Stifling sensation in the chest and diaphragm. Breathing difficulty. Palpitations. Wheezing (Asthma). Nausea. Vomiting.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi and stops vomiting. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Sheng Jiang, for vomiting due to Dis-harmony of the Stomach Qi. With Zhi Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Ban Xia and Fu Ling, for cough due to accumulation of Dampness and Phlegm.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and transforms Phlegm. With Ban Xia, Chen Pi and Sheng Jiang, for congested fluids in the Stomach causing nausea and vomiting.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, resolves Phlegm, stops cough and moderates and harmonizes the harsh properties of other herbs.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold, stops cough and treats dyspnea. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Chen Pi, Ban Xia, Fu Ling and Gan Cao, for coughing during the night, dyspnea and profuse and salty-tasting sputum due to Kidney and Lung Yin Deficiency.

-Shu Di Huang - Nourishes Liver and Kidney Yin and arrests cough and wheezing. With Chen Pi, Ban Xia, Fu Ling, Dang Gui and Gan Cao, for cough, wheezing and sputum due to Kidney Deficiency.

-Sheng Jiang - Releases the Exterior, induces perspiration. disperses Cold, warms the Middle, stops vomiting, warms the Lungs, stops cough and reduces the toxicity of other herbs. With Ban Xia, for vomiting due to many causes including Stomach Cold and productive cough due to Phlegm-Dampness.

TREATS

Common cold in the elderly. Hemoptysis. Cough. Asthma. Male menopause. Chronic bronchitis in the elderly. Asthma in the elderly. COPD. Nausea/Vomiting. Palpitations.

* SHU QI HUO XUE TANG - 顺气活血汤 - Normalize The Flow Of Qi And Invigorate The Blood Decoction

ACTIONS - Moves Qi. Eliminates Stagnation. Invigorates the Blood. Breaks up Stasis.

SYNDROMES - Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - A history of traumatic injury to the low back and/or hip area. Severe pain. Enduring pain. Fixed pain. Pain is worse at night. Pain extends from the low back to the thigh, possibly radiating to the lower thigh and lateral leg. Pain worse with pressure. Possible pain on coughing. Possible palpable cords or hardness in the buttock area. Possible restricted movement of the lower limbs. Possible systemic symptoms of Qi and Blood Stagnation: Irritability. Premenstrual breast distention and pain. Dysmenorrhea. A dark, sooty facial complexion.

HERBS AND ACTIONS

-Zi Su Geng - Promotes the flow of Qi, harmonizes the Middle Jiao, expands the chest and benefits the diaphragm. With Xiang Fu, for fullness, distention, and discomfort in the epigastrium and abdomen due to Liver attacking the Spleen.

-Su Mu - Invigorates Blood circulation, dispels Blood Stasis, reduces swellings, opens the channels and alleviates pain. With Hong Hua, for traumatic injury with painful, swollen bruises or hematomas.

-Dang Gui - Invigorates and harmonizes the Blood. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis. With Xiang Fu, tonifies the Blood and moves Qi.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis and relieves pain. With Tao Ren, for Blood Stasis. with Xiang Fu, for flank pain, abdominal pain and dysmenorrhea due to Qi and Blood Stagnation.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Hong Hua, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea with abdominal pain, clotting and scanty flow, swollen painful sores and chest pain due to Blood Stasis. With Hong Hua, Dang Gui and Chi Shao, for trauma with pain.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure and resolves hardenings.

-Hou Po - Promotes the movement of Qi in the Middle Jiao and resolves Stagnation.

-Xiang Fu - Spreads and regulates Liver Qi and alleviates pain.

-Mu Xiang - Promotes the movement of Qi and alleviates pain.

-Sha Ren - Promotes the movement of Qi.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain.

TREATS

Piriformis syndrome.

* XIAO QING LONG TANG - 小青龙汤 - Minor Blue Green Dragon Decoction. Minor Blue Dragon Combination. Minor Blue Dragon Decoction. Minor Decoction of Blue Dragon

ACTIONS - Releases the Exterior. Transforms congested Fluids (Thin Mucus). Transforms Phlegm. Warms the Lungs. Descends Qi. Relieves wheezing and coughing.

SYNDROMES - Wind-Cold Attacks the Lungs (severe). Exogenous Wind-Cold Invasion with Water Retention due to Spleen Deficiency. Yi Yin. Zhi Yin.

CLINICAL MANIFESTATIONS - Fever and chills (chills predominant). Anhidrosis. Cough. Wheezing (asthma). Copious, white, stringy, difficult to expectorate sputum.

Stifling sensation in the chest. Lacrimation. General heaviness (especially upper body). General body aches. No thirst. Floating edema (severe). Considerable difficulty breathing while lying down (severe). Intolerance of Cold. Periorbital edema. Dyspnea. Vomiting of frothy saliva during pregnancy. Chest distention. Stiff neck. Dry heaves. Decreased urine. Subcardiac edema. Stridor. Occasional chills on the back. Hiccups. Retching. Dysphagia. Diarrhea. Dysuria. Decreased urination. Flushed face. Dizziness. Headache. Inflammation of the tear ducts.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not use long term. Contraindicated for those with Heat conditions. Contraindicated for those with hemoptysis. Contraindicated for those with coughing due to Yin Deficiency. Contraindicated for those with dry mouth and throat with thick, yellow sputum. Contraindicated for those with a sore throat and a rapid pulse. Use with caution for those with hypertension.

NOTES - The combination of inhaled fluticasone and this formula can be an important modality in the treatment of mild and severe asthma patients.

HERBS AND ACTIONS

-Ma Huang - Induces sweating, releases the exterior, disseminates and facilitates Lung Qi, calms wheezing, stops coughing, warms Cold and circulates water. With Gui Zhi, for Wind-Cold Excess with fever, chills and anhidrosis. With Gan Jiang, for stagnant Fluids. With Gan Jian, Xi Xin and Ban Xia, for wheezing or coughing due to an Exterior Wind-Cold Attack and Cold Stagnation in the Interior.

-Gui Zhi - Releases the exterior, disperses Cold, adjusts the Ying and Wei and warms the channels. With Ma Huang, releases the exterior and Warms Cold. With Bai Shao, warms and tonifies the Middle Jiao.

-Gan Jiang - Warms the Lungs, transforms thin mucus, warms the Middle and expels Cold. With Xi Xin, warms the interior and transforms Fluids. With Xi Xin, Ma Huang and Gui Zhi, releases the exterior. With Ban Xia, for vomiting of saliva or dry heaves due to Cold-induced congested fluids.

-Xi Xin - Releases Wind and Cold, warms the Lungs, disperses Internal Cold, circulates water, transforms Phlegm and opens the nose. With Ma Huang, stops cough and wheezing due to Wind-Cold Attacks the Lungs. With Ma Huang and Gui Zhi, releases the Exterior. With Wu Wei Zi, for coughing and wheezing due to Cold Phlegm.

-Wu Wei Zi - Prevents leakage of Lung Qi, stops cough, astringes sweat and generates fluids. With Xi Xin, regulates the opening and closing of the Lungs, alleviating coughing and calming wheezing for patients with existing thin mucus who are exposed to Wind-Cold leading to acute wheezing and coughing of clear thin sputum. With Gan Jiang and Xi Xin, for Cold in the Lung channel with non-stop coughing and wheezing. With Gan Jiang, Ma Huang and Xi Xin, for coughing and wheezing from Cold Thin Mucus.

-Bai Shao - Nourishes Blood, astringes Yin and adjusts the Ying and Wei. With Gui Zhi, harmonizes the Ying and Wei in Tai Yang Zhong Feng.

-Ban Xia - Transforms Phlegm, descends Qi, dries Dampness and harmonizes the Stomach. With Xi Xin and Gan Jiang, for vomiting due to Cold with copious, frothy sputum with Cold signs and thin mucus in the Lungs.

-Gan Cao - Augments Qi and moderates and harmonizes the harsh properties of other herbs. With Gan Jiang, Xi Xin and Wu Wei Zi, for coughing due to Wind-Cold with sputum.

TREATS

Acute bronchitis. Acute exacerbation of chronic bronchitis. Edematous arthritis. Sinusitis. Bronchial asthma. Influenza. Common cold. Fever. Acute asthmatic bronchitis. Acute upper respiratory tract infection. Cardiopulmonary disease. Congestive Heart failure. Viral conjunctivitis. Enteritis. Atrophic gastritis. Chronic bacillary dysentery. Rheumatic Heart disease. Epilepsy. Periarthritis of the shoulder. Bronchiectasis. Periorbital edema. Conjunctivitis. Headache. Cough. Dizziness. Meniere's disease. Numbness. Dysphagia. Pyelonephritis. Spontaneous perspiration. Morning sickness. Pulmonary emphysema. Infantile allergic rhinitis. Pediatric asthma. Pertussis. Allergic rhinitis. Renal cirrhosis. Senile emphysema. Chronic bronchitis. Chronic obstructive pulmonary disease (COPD). Hay fever. Dacryosolenitis. Peptic ulcer. Nephritis. Pleuritis. Enuresis. Pneumonia. Pulmonary tuberculosis. Bronchial dilation. Inflammation of the tear ducts. Lacrimation. Hiccups. Vertigo. Oliguria. Paresthesia. Nausea/Vomiting. Edema. Chronic renal failure. Dyspnea. Stiff neck. Sore throat.

* XING REN HUA SHI TANG - 杏仁滑石湯 - Apricot Kernel And Talcum Decoction

ACTIONS - Clears Heat and Summerheat. Resolves Dampness.

SYNDROMES - Damp-Heat in all three Jiaos. Damp Summerheat in all three Jiaos.

CLINICAL MANIFESTATIONS - Tidal fever. Sweating. Thirst. Stifling sensation in the chest. Nausea. Severe diarrhea. Scanty urine.

HERBS AND ACTIONS

-Xing Ren - Disperses the Lungs, stops cough and resolves Phlegm. With Hou Po, for Upper and Middle Jiao Dampness with a stifling sensation in the chest and epigastric and abdominal distention with a feeling of fullness.

-Huang Qin - Clears Heat, drains Fire and dries Dampness. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and

pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease.

-Huang Lian - Drains Fire, relieves toxicity, clears Heat and drains Dampness. With Huang Qin for high fever in Warm-Febrile disease.

-Chen Pi - Regulates Qi and dries Dampness.

-Hou Po - Regulates Qi and transforms Dampness. With Huang Lian, for acute diarrhea associated with sudden turmoil disorder from Damp-Heat.

-Yu Jin - Invigorates the Blood, breaks up Stagnation and regulates Qi.

-Hua Shi - Promotes urination, drains Heat from the Bladder, clears Heat, releases Summerheat and expels Damp-Heat through the urine.

-Tong Cao - Promotes urination and clears Heat.

TREATS

Gastroenteritis. Abdominal pain. Oliguria. Nausea/Vomiting. Diarrhea. Perspiration. Encephalitis B. Colitis. Fever. Chronic fatigue syndrome. Fatigue.

* ZHI BAI DI HUANG WAN - 知柏地黄丸 - Anemarrhena, Phellodendron And Rehmannia Pill. Anemarrhena, Phellodendron and Rehmannia Formula. Zhi Bai Ba Wei Wan

ACTIONS - Enriches Yin. Nourishes the Essence of the Liver and Kidneys. Reduces Deficiency Fire.

SYNDROMES - Kidney Yin Deficiency with Fire Flaring. Liver and Kidney Yin Deficiency (with Fire Flaring). Steaming Bone Disorder. Damp-Heat in the Lower Jiao with underlying Kidney Yin Deficiency.

CLINICAL MANIFESTATIONS - Night sweats. Dry mouth and tongue. Lower back and knee pain. Urinary difficulty. Weakness of the lower back, knees and extremities. Steaming bones. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five sole Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Irritability. Dry skin. Deafness. Spontaneous and nocturnal emissions. Tidal fevers. Loose teeth. Dripping urine. Thirst. Swollen gums, painful and light red in color. Numbness and weakness at the waist and knees. Heel pain. Scanty urination. Frequent, scanty, yellow urination. Pain at midline. Lower back and knee pain. Sore throat.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those

with Spleen Deficiency type diarrhea and indigestion with a white greasy tongue coat. Contraindicated for those with Yang Deficiency. Administration of this formula showed effectiveness in treating streptomycin-induced toxicities.

HERBS AND ACTIONS

-Zhi Mu - Clears Heat, drains Fire, enriches Yin, moistens Dryness and generates Fluids. With Huang Bai, for Yin Deficiency with Fire Flaring, Steaming Bone Disorder and Lower Jiao Damp-Heat. with Huang Bai and Shu Di Huang, for Yin Deficiency with Empty Fire.

-Huang Bai - Drains Damp-Heat, drains Kidney Fire and relieves toxicity.

-Shu Di Huang - Nourishes Yin and Blood and tonifies the Kidneys.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops Excess perspiration. With Shan Yao, tonifies the Liver and Spleen. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats.

-Fu Ling - Strengthens the Spleen and drains Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Mu Dan Pi - Clears Heat, cools and invigorates the Blood, clears Deficiency Fire and dispels Blood Stasis .

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Mu Dan Pi, for Steaming Bone Disorder, dizziness, and vertigo. With Fu Ling, promotes urination. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies.

TREATS

Gingivitis. Steaming Bone Disorder. Excess dreaming. Cystitis. Menopause. Amenorrhea. Neurasthenia. Pulmonary tuberculosis. Diabetes mellitus. Chronic nephritis. Hyperthyroidism. Chronic glomerulonephritis. Chronic urinary tract infection. Hypertension. Failure to thrive. Functional uterine bleeding. Optic neuritis. Optic nerve atrophy. Central retinitis. Male infertility. Nephrotic syndrome. Epistaxis. Chronic neuritis. Gouty arthritis. Chronic pharyngitis. Polycystic ovary syndrome. Vaginal itch. Vaginal pain. Infertility. Cataracts. Acne. Dizziness. Meniere's disease. Kidney failure. Polyuria. Prostate cancer. AIDS/HIV. Anemia. Tidal fevers. Lupus erythematosus. Neurosis. Low

back pain. Cushing's syndrome. Palpitations. Herpes genitalia. Hoarseness. Enuresis. Interstitial cystitis. Cervical lymphadenopathy. Otitis media. Night sweats. Puerperal fever. Premature ejaculation. Strangury. Toothache. Otorrhea. Post-menopausal uterine bleeding. Neck stiffness and pain. Viral hepatitis. Thrombophlebitis. Lip pain. Tongue pain. Vaginitis. Nephroatrophy. Senility. Impotence. Spermatorrhea. Esophageal cancer. Chronic asthma. Bronchitis. COPD. Side effects of steroids. Allergic disorders. Bronchiaesthenia. Chronic urticaria. Infectious hepatitis. Nocturnal emissions. Irregular menstruation. Addison's disease. Congestive Heart failure. Sore throat. Dry mouth. Retarded growth in children. Hemospermia. Tinnitus. Deafness. Geriatric dryness. Spontaneous perspiration. Eczema. Prostatic hypertrophy. Prostatitis. Vaginal discharge. Heel pain. Insomnia. Pterygium. Cough. Vertigo. Oliguria. Hematuria. Bladder cancer. Paralysis. Hyperglycemia. Constipation. Thrombocytopenic purpura. Knee pain. Forgetfulness. Chronic leukemia. Weakness. Pyelonephritis. Headache. Sciatica. Morning sickness. Facial paralysis. Hemilateral sweating. Ascites. Dermatitis. Urinary tract infection. Rheumatoid arthritis. Dry skin. Dysmenorrhea. Hydrocephalus. Chronic hepatitis. Polymyositis. Senile vaginitis. Sexual neurosis. Thrush associated with AIDS/HIV.

* ZHI MEI JING YIN SAI JI - Anti-fungal Vaginal Cleansing Formula

ACTIONS - Clears Toxic Heat in the Lower Jiao.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Profuse yellow blood streaked (stained) leukorrhea (vaginal discharge). Sticky with a strong odor. Thirst. General feeling of Heat. Dark urine.

HERBS AND ACTIONS

-Wu Mei - Kills parasites and alleviates pain. With Bin Lang, for abdominal pain due to roundworms in either the intestines or the bile duct.

-Da Suan - Kills parasites, resolves toxicity, warms the Stomach, strengthens the Spleen, promotes the movement of Qi and reduces Stagnation.

-Shi Liu Pi - Kills parasites, astringes the Intestines, stops diarrhea, stabilizes Kidneys and retains Jing. With Bin Lang, for tapeworms and roundworms with abdominal pain.

-Bin Lang - Kills parasites, regulates Qi, reduces accumulations, drains downward and unblocks the bowels.

-Hua Jiao - Kills parasites, warms the Middle Jiao, disperses Cold, dispels Dampness, relieves diarrhea and alleviates abdominal pain.

TREATS

Vaginal discharge. Fungal infections.

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Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_17

Ban Xia Xie Xin Tang, Chai Hu Shen Zhu Tang, Chai Xian Tang, Er Miao San, Flat Warts Topical #1, Ma Gui Ge Ban Tang, San Ren Tang, Tourette Syndrome #1, Wan Dai Tang

Recordings Updated in May 2025

* BAN XIA XIE XIN TANG - 半夏瀉心湯 - Pinellia Decoction To Drain The Epigastrium. Pinellia Combination. Decoction of Pinellia for Purging Stomach Fire. The Stomach Purging Powder with Pinellia

ACTIONS - Harmonizes the Stomach. Descends Rebellious Qi. Disperses clumping. Eliminates focal distention due to Cold and Heat factors.

SYNDROMES - Disharmony Between the Stomach and Intestines with interaction of Cold and Heat factors. Improper purging of the Shao Yang with underlying Stomach Deficiency. Damp-Heat in the gastrointestinal area. Gu Syndrome.

CLINICAL MANIFESTATIONS - Epigastric focal distention. Fullness and tightness with very slight or no pain. Dry heaves. Vomiting. Borborygmus. Diarrhea. Anorexia. Stomach pain. Abdominal pain. Subcardiac distention. Heartburn. Resistance below the Heart. Soft epigastrium. Nausea. Ascites. Gurgling sounds.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with focal distention due to Qi Stagnation or Food Stagnation or Accumulation of Phlegm and Heat. Contraindicated for those with nausea and vomiting due to Yin Deficiency. Diarrhea induced by cisplatin (Platinol) and irinotecan (Camptosar) was effectively controlled by this formula.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, dissipates clumps, descends

Rebellious Qi, harmonizes the Stomach, stops vomiting and eliminates focal distention. With Ren Shen, for vomiting due to Stomach Deficiency. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting. With Huang Lian, Huang Qin and Gan Jiang, for nausea and vomiting due to Heat and Cold.

-Gan Jiang - Warms the Middle, expels Cold, warms the Lungs and transforms thin mucus. With Huang Lian, for epigastric pain and distention, dysentery, indeterminate gnawing hunger, vague abdominal pain or discomfort, belching, and nausea. With Ban Xia, for vomiting of saliva or dry heaves due to Cold-induced congested fluids. With Gan Cao, for epigastric pain and vomiting due to Spleen and Stomach Deficiency Cold. With Ban Xia and Ren Shen, for vomiting due to Deficiency Cold.

-Huang Qin - Clears Heat, dries Dampness, drains Fire and detoxifies. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease.

-Huang Lian - Clears Heat, drains Dampness, drains Fire, resolves Fire toxicity and drains Stomach Fire. With Ban Xia, for Cold and Heat in the Middle Jiao with abdominal fullness, nausea and vomiting. With Ban Xia and Gan Jiang, for Cold and Heat complexes in the Intestines and Stomach marked by focal distention, nausea, vomiting and feelings of oppression in the chest. With Huang Qin, Ban Xia and Gan Jiang, for Damp-Heat in the Middle Jiao.

-Ren Shen - Tonifies Spleen, Stomach and Lung Qi and tonifies Qi in Deficiency patients with Exterior conditions. With Da Zao, benefits the Middle Jiao Qi and prevents injury to the Qi.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, and moderates and harmonizes the harsh properties of other herbs.

-Gan Cao - Tonifies the Spleen, augments Qi, clears Heat, relieves Fire toxicity and moderates and harmonizes the properties of other herbs.

TREATS

Acute gastroenteritis. Atrophic gastritis. Chronic gastritis. Chronic hepatitis. Early-stage cirrhosis of the Liver. Indigestion due to hyper-secretion of acid. Ulcer. Gastric cancer. Ascites. Chronic cholecystitis. Cholelithiasis. Hepatitis C. Chronic asthma. Aphthous ulcers. Insomnia. Morning sickness. Upper gastrointestinal bleeding. Irritable bowel syndrome. Renal failure. Stress. Leaky gut syndrome. Chronic fatigue syndrome. Genital warts. Gastralgia. Gu syndrome. Celiac disease. Abdominal pain. Acid reflux. Anorexia. Fatigue. Hiatus hernia. Chemotherapy for breast cancer. Ulcerative colitis. Systemic lupus erythematosis. Enteritis. Gastromegaly. Duodenal ulcer. Stomatitis.

Motion sickness. Gastroesophageal reflux disease. Colitis. Hyperthyroidism. Conjunctivitis. Coronary artery disease. Amenorrhea. Superficial gastritis. Gastrectasis. Gastroptosis. Infantile indigestion. Cirrhosis of the Liver. Depression. Gastromegaly. Candidiasis. Giardiasis. Anal warts. Colitis. Oliguria. Nausea/Vomiting. Abdominal fullness and distention. Diarrhea. Chronic pancreatitis. Esophageal cancer. Hypoglycemia. Scleroderma. Temporomandibular joint syndrome (TMJ.)

* CHAI HU SHEN ZHU TANG - 柴胡參术湯 - Bupleurum, Ginseng And Atractylodes Decoction

ACTIONS - Soothes the Liver. Clears Stagnation. Tonifies Qi. Nourishes Blood.

SYNDROMES - Liver Qi Stagnation With Qi and Blood Deficiency.

CLINICAL MANIFESTATIONS - Dizziness. Eye pain. Distention and pain in the sides or flanks. Suffocating sensation in the chest. Tendency to sigh. Melancholy. Depression. Anxiety. Irritability. Inappropriate anger. Anorexia. Irregular menses. Dysmenorrhea. Irregular menstruation. Breast distention and pain before and during menses.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi. With Shu Di Huang, for Qi and Yin Deficiency. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Ren Shen, for Qi and Blood Deficiency.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs. With Ren Shen, relieves palpitations and anxiety.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Bai Zhu - Tonifies the Spleen and augments Qi.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Qing Pi, for intercostal pain due to Qi obstruction in the Liver channel.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With Dang Gui, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Qing Pi - Spreads Liver Qi and breaks up Stagnant Qi. With Chai Hu, restores the Qi circulation between the Upper and Lower Jiaos to treat long-term Qi Stagnation moving to Blood Stasis.

TREATS

Optic atrophy.

* CHAI XIAN TANG - 柴陷湯 - Bupleurum Decoction To Raise The Sunken. Bupleurum Chest Bind Decoction. Bupleurum and Scute Combination.

ACTIONS - Clears Heat. Transforms Phlegm. Expands the chest. Releases the Shao Yang.

SYNDROMES - Shao Yang disorders with Phlegm-Heat Stagnation in the chest.

CLINICAL MANIFESTATIONS - Alternating chills and fever. Fullness and focal distention in the chest and diaphragm. Pain in the chest and diaphragm with pressure. Thick, sticky, difficult-to-expectorate Phlegm. Panting. A bitter taste in the mouth. Chest pain with coughing or on deep inhalation.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, descends Qi and alleviates nausea. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach. With Huang Lian and Gua Lou, for Phlegm-Heat clumping in the chest and epigastrium with a stifling, distended sensation in the epigastrium that is aggravated by pressure, coughing of viscous, yellow sputum, a greasy, yellow tongue coat and a slippery, rapid pulse. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting. With Gua Lou, for focal distention in the chest and diaphragm due to clumping of Phlegm and Heat leading to Qi Stagnation and chest Bi due to clumping of sticky, thick and turbid Phlegm.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Lungs and stops cough. With Ban Xia, for productive cough due to Phlegm-Dampness.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity. With Huang Qin, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease.

-Huang Qin - Clears Heat, dries Dampness, drains Fire, detoxifies, cools the Blood, stops bleeding and calms ascending Liver Yang. With Chai Hu, for Heat in the Shao Yang with alternating chills and fever, and nausea.

-Chai Hu - Resolves Shao Yang disorders and reduces fever (harmonizes the Exterior and Interior). With Huang Qin clears Liver and Gallbladder Heat. With Huang Qin and

Ban Xia, for Shao Yang disorders with alternating chills and fever and a sensation of fullness in the hypochondria and chest.

-Gua Lou - Clears Heat, transforms Hot Phlegm and expands the chest. ith Jiang Ban Xia, Huang Qin, Huang Lian and Chai Hu, for cough with chest pain and difficult to expectorate sputum with extreme Heat.

-Ren Shen - Tonifies Lung Qi.

-Gan Cao - Moistens the Lungs, resolves Phlegm, stops cough and moderates and harmonizes the harsh properties of other herbs.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, prevents Phlegm accumulation.

TREATS

Intermittent fever. Common Cold. Bronchial Asthma. Pneumonia. Cholecystitis. Cholelithiasis. COPD. Hypochondriac pain. Influenza. Bronchitis. Pleurisy. Chronic hepatitis. Acute hepatitis. Cough.

* ER MIAO SAN - 二妙散 - Two-Marvel Powder. Powder of Two Effective Ingredients

ACTIONS - Eliminates Heat and Dampness.

SYNDROMES - Damp-Heat in the Lower Jiao. Low back pain due to Heat.

CLINICAL MANIFESTATIONS - Pain in low back and knees. Aches and pains in the bones and sinews. Weakness or atrophy of lower extremities. Scanty yellow urine. Red, hot, swollen and painful feet or knees. Edema in lower legs. Leukorrhea (thick, yellow, foul-smelling). Sores on lower extremities due to Damp. Redness, swelling and pain of the knees with burning sensations. Oliguria. Eczema.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Modify for those with Lung Heat or Liver and Kidney Deficiency.

HERBS AND ACTIONS

-Huang Bai - Drains Damp-Heat, especially from the Lower Jiao and drains Kidney Fire.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, and clears Dampness from the Lower Jiao. With Huang Bai, for pain, swelling, and weakness of the lower extremities due to Wind-Dampness.

TREATS

Arthritis. Urinary tract infection. Vaginitis. Vulvitis. Cervicitis. Beriberi. Rheumatoid arthritis. Gouty arthritis. Muscle Bi. Blepharitis. Eczema. Erythromelalgia. Myasthenia gravis. Herpes genitalia. Edema. Arthralgia. Acute nephritis. Gonococcal arthritis. Low back pain. Knee pain. Inflammation of the lower limbs. Tinea pedis. Eczema. Gonorrhea. Dysmenorrhea. Panarthralgia. Ankylosing spondylitis. Neurodermatitis. Dermatitis. Fungal infections. Weakness. Vaginal discharge. Polymyositis. Foot pain.

* FLAT WARTS TOPICAL #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Eliminates warts topically.

SYNDROMES - Flat warts.

CLINICAL MANIFESTATIONS - Flat warts.

HERBS AND ACTIONS

-Da Qing Ye - Clears Heat, resolves Fire toxicity, cools the Blood and dissipates maculae.

-Ban Lan Gen - Drains Heat, relieves Fire toxicity and cools the Blood.

-Yi Yi Ren - Clears Heat and expels pus.

-Xia Ku Cao - Clears Hot Phlegm and dissipates nodules.

-Long Dan - Drains Damp-Heat from the Liver and Gallbladder channels and drains and pacifies Excess Liver Fire.

TREATS

Flat warts.

* MA GUI GE BAN TANG -麻桂各半汤 - Ephedra And Cinnamon Decoction. Gui Zhi Ma Huang Ge Ban Tang. Cinnamon and Ma Huang Combination

ACTIONS - Dispels Wind-Cold. Regulates the Ying and Wei. Stops itching.

SYNDROMES - Tai Yang Zhong Feng.

CLINICAL MANIFESTATIONS - Pale red eruptions. Worse on exposure to Cold or cold water. Better with Heat. Urticaria. Eczema. Generalized itching. Aversion to Wind. Aversion to Cold.

HERBS AND ACTIONS

-Ma Huang - Induces sweating, releases the Exterior and warms and disperses Cold pathogens. With Xing Ren, for Wind-Cold coughing and wheezing.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Ma Huang, for Wind-Cold Excess conditions with fever and chills but no sweat. With Bai Shao, for External Wind-Cold with disharmony between the Ying and Wei (Tai Yang Zhong Feng), with spontaneous sweating, fever and chills.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei. With Gan Cao, regulates the relationship between the Liver and Spleen. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, adjusts the Ying and Wei and normalizes the flow of Qi at the center. With Gui Zhi, strongly induces sweating for the treatment of External Wind-Cold with chills, fever, body aches and anhidrosis. With Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Ma Huang, Sheng Jiang and Xing Ren, for coughing or wheezing due to Wind-Cold Attacks the Lungs.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, for External Wind-Cold and adjusts the Ying and Wei for treatment of Tai Yang Zhong Feng.

-Xing Ren - Stops coughing and calms wheezing. With Ma Huang and Gan Cao, for coughing with profuse sputum, nasal obstruction and a hoarse voice.

TREATS

Urticaria. Eczema. Erythema multiforme.

* SAN REN TANG - 三仁湯 - Three Seed (Nut) Decoction. Apricot, Coix and Cluster Combination.

ACTIONS - Spreads Qi. Facilitates Qi. Clears Damp-Heat (Clears Damp-Heat from the Qi Level by unblocking Lung Qi, transforming and drying Dampness from the Middle Jiao, Draining Dampness from the Lower Jiao and Clearing Heat.)

SYNDROMES - Damp-Heat (early stage). Summerheat with Damp. San Jiao Upper Jiao Heat. Wei Stage Damp-Heat.

CLINICAL MANIFESTATIONS - Headache. Chills. Afternoon fever. Heavy sensation in the body. Generalized pain. Pale yellow (sallow) complexion. Stifling sensation in chest. Loss of appetite. Feverishness and pain of the body. Fatigue. Lack of thirst or thirst with no desire to drink. Chest and abdominal fullness. Maybe aversion to Cold. Nausea. Heaviness of the head.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only for Damp-Heat disorders where Damp is predominant.

HERBS AND ACTIONS

-Xing Ren - Stops cough and wheezing, moistens the Intestines and unblocks the bowels. With Hou Po, for Upper and Middle Jiao Dampness with a stifling sensation in the chest and epigastric and abdominal distention with a feeling of fullness.

-Dou Kou - Aromatically transforms Dampness, warms the Middle Jiao, stops vomiting, descends Qi, moves Qi and transforms Stagnation. With Xing Ren and Yi Yi Ren, for headache, stifling sensations in the chest, fatigue, dark, scanty urine, diarrhea, and usually with a white, greasy tongue coat as in the early stages of a warm febrile disease. With Hou Po, for distention due to Qi Stagnation or Cold-Damp in the Spleen and Stomach.

-Hou Po - Transforms Dampness, promotes the movement of Qi, and descends Rebellious Qi.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, harmonizes the Stomach and stops vomiting. With Hou Po, for Phlegm-induced cough, vomiting, and epigastric and abdominal distention.

-Yi Yi Ren - Promotes urination, leaches out Dampness, strengthens the Spleen, expels Wind-Dampness, clears Damp-Heat and stops diarrhea. With Xing Ren and Dou Kou, for early-stage Damp-Warmth with Damp predominant.

-Tong Cao - Promotes urination and clears Heat. With Hua Shi and Yi Yi Ren, for Summerheat with Turbid Dampness causing painful urinary dysfunction, a stuffy chest, heaviness in the body and headache. With Dou Kou, Hua Shi and Yi Yi Ren, for painful urination, cloudy urination and heaviness of the body due to Damp-Heat. With Hua Shi, Yi Yi Ren, Ban Xia, Hou Po and Dou Kou, for Damp febrile disorders with sensations of heaviness of the body, lack of thirst, chest oppression afternoon fever and dysuria.

-Dan Zhu Ye - Clears Heat, eliminates irritability, promotes urination and Clears Damp-Heat.

-Hua Shi - Promotes urination, drains Heat from the Bladder, expels Damp-Heat and releases Summerheat.

TREATS

Morning sickness. Fever of unknown origin. Biliary ascariasis. Enteric fever. Pyelonephritis. Brucellosis. Bacillary dysentery. Arthritis. Diabetes. Altitude stress. Cardiopulmonary diseases. Priapism. Restless leg syndrome. Lymphadenitis. Influenza. Headache. Epilepsy. Dizziness. Fever. Myalgic encephalomyelitis. Epstein-Barr virus syndrome. Anorexia. Hernia. Spontaneous perspiration. Rheumatic fever. Poor vision associated with AIDS/HIV. Undulant fever. Postoperative fever. Typhoid fever. Gastroenteritis. Hepatitis. Gastritis. Colitis. Chronic bronchitis. Pneumonia. Otitis media. Cholecystitis. Chronic glomerulonephritis. Obesity with dizziness. Sunstroke. Pyelitis. Cataracts with excessive tearing. Vertigo. Oliguria. Nausea. Chronic fatigue syndrome. Abdominal fullness and distention. Fatigue. Impotence. Middle back pain. Nasal pain.

* TOURETTE SYNDROME #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies the Spleen. Augments Qi. Dries Dampness. Transforms Phlegm. Descends Qi. .Extinguishes Wind. Calms the Liver. Stops spasms and tremors.

SYNDROMES - Wind-Phlegm.

CLINICAL MANIFESTATIONS - Tics. Spasms.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm and Descends Rebellious Qi.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and descends Qi. With Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Ban Xia and Fu Ling, for coughing due to accumulation of Dampness and Phlegm.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Ban Xia, treats Phlegm, thin mucus and turbid Dampness.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs.

-Tian Ma - Extinguishes Wind, calms the Liver, stops spasms and tremors, subdues Rising Liver Yang and alleviates pain.

-Gou Teng - Extinguishes Wind, alleviates spasms, drains Liver Heat and pacifies Liver

Yang. With Tian Ma, calms the Liver and extinguishes Wind.

-Zhen Zhu - Sedates the Heart, settles tremors and palpitations and clears the Liver. With Ban Xia, Fu Ling and Gou Teng, for Continuous palpitations or palpitations with anxiety with disorientation.

TREATS

Tourette syndrome.

* WAN DAI TANG - 完帶湯 - End Discharge Decoction. Decoction to Treat Leukorrhagia. Decoction for Morbid Leukorrhea

ACTIONS - Tonifies the Spleen. Tonifies the Middle Jiao. Disperses Liver Qi Stagnation. Transforms Dampness. Stops vaginal discharge.

SYNDROMES - Spleen Deficiency and Liver Qi Stagnation with Dampness and turbidity in the Lower Jiao. Dai channel dysfunction.

CLINICAL MANIFESTATIONS - Profuse vaginal discharge that is white or pale-yellow. The discharge is thin in consistency, not foul smelling and usually continuous. Fatigue. Lethargy. A shiny, pale complexion. Loose stools. Diarrhea.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with yellow, bloody, thick, sticky or foul smelling discharge due to Liver Stagnation transforming into Heat or Damp-Heat.

HERBS AND ACTIONS

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness, promotes water metabolism and calms the fetus. With Che Qian Zi, for diarrhea due to Dampness. With Cang Zhu, for vaginal discharge. with Shan Yao, Che Qian Zi and Can Zhu, for clear, watery vaginal discharge due to Spleen and Stomach Deficiencies with Dampness.

-Shan Yao - Tonifies the Spleen, nourishes Stomach Yin, stops diarrhea, tonifies Kidney Yin and astringes Jing. With Chai Hu and Bai Shao, for vaginal discharge due to Spleen Deficiency and Liver Qi Stagnation. With Ren Shen and Bai Zhu, for Decreased appetite and lack of energy due to Spleen Deficiency. With Bai Zhu, Cang Zhu, Bai Shao and Chai Hu, for Leukorrhea due to Spleen Qi Deficiency with Liver Qi Stagnation.

-Ren Shen - Powerfully tonifies Qi. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen and clears Dampness from the Lower Jiao.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and helps prevent Stagnation from tonic herbs. With Bai Zhu, for anorexia and other symptoms of Damp-Obstruction due to Spleen Deficiency.

-Che Qian Zi - Promotes urination, clears Damp-Heat and clears Liver Heat. With Cang Zhu, for Damp-Heat vaginal discharge with Spleen Deficiency.

-Bai Shao - Nourishes the Blood, regulates menstruation, calms Liver Yang and softens the Liver. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach. With Chai Hu, for flank pain due to Liver Qi Stagnation.

-Chai Hu - Spreads Liver Qi, relieves Stagnation and raises Yang Qi. With Bai Shao, for Liver Blood Deficiency with Liver Qi Stagnation and vertigo, dizziness, thoracic and costal pain, and menstrual irregularity due to Liver Qi Stagnation. With Gan Cao, for hepatitis and upper right quadrant pain.

-Jing Jie - Stops bleeding.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

TREATS

Leukorrhea. Otitis media. Tinnitus. Impotence. Subdural hematoma. Rhinitis. Pre-eclampsia. Vaginitis. Edema during pregnancy. Irritable bowel syndrome. Vaginal fungus. Vulvitis. Fatigue. Vaginitis. Chronic gastritis. Hepatitis. Colitis. Chronic bacillary dysentery. Chronic pyelonephritis. Nephritis with proteinuria. Cervicitis. Cervical polyps. Infertility. Chronic glomerulonephritis. Streptococci. Hemophilus vaginitis. Diarrhea.

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Traditional Chinese Medicine

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Candida Douche #1, Qing Jie Pian, Ru Ai Xi Ji, Shi Quan Da Bu Tang, Shu Jin Tang, Si Qi Tang, Tao He Cheng Qi Tang, Trichomonas Vaginitis Wash, Tui Chi San

Recordings Updated in May 2025

* CANDIDA DOUCHE #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Dries Dampness. Strengthens Yang. Kills parasites. Stops itching.

SYNDROMES - Damp-Heat in the Lower Jiao.

CLINICAL MANIFESTATIONS - Vaginal yeast infections. Skin lesions with profuse fluid discharge. Fever. Thirst. Dry mouth with no desire to drink. Anorexia. Body heavy. Limbs tired. Fatigue. Digestive disorders. Fullness in chest. Lump in epigastrium. Leukorrhagia with thick, yellowish, foul discharge. Frequent, scanty, reddish urination.

HERBS AND ACTIONS

-Yin Yang Huo - Tonifies the Kidneys and strengthens Yang.

-Bai Xian Pi - Clears Damp-Heat and stops itching. With Ku Shen, for Damp-Heat sores that itch.

-Ku Shen - Clears Heat, dries Dampness kills parasites, stops itching and promotes urination.

TREATS

Yeast infections. Candidiasis.

* QING JIE PIAN - 清解片 - Clear And Relieve Tablet

ACTIONS - Clears Heat. Drains Fire. Relieves toxicity. Relieves inflammation.

SYNDROMES - Toxic Heat.

CLINICAL MANIFESTATIONS - Dermatitis. High fever. Irritability. Fidgeting. Dry mouth. Dry throat. Incoherent speech. Insomnia. Dark urine. Deep-rooted boils. Maculae. Carbuncles. Hematemesis. Hemoptysis. Palpitations. Furuncles. Tinnitus. Purpura. Red face. Rashes. Deep-rooted boils. Red eyes. Itchy skin. Fidgeting. Dry lips. Delirium. Dysentery with fever. Jaundice. Epistaxis. Hematuria. Cloudy mind. Diarrhea.

HERBS AND ACTIONS

- Da Huang - Drains Heat, purges accumulations, reduces Fire toxicity, transforms Dampness and promotes urination.

-Huang Qin - Clears Heat, dries Dampness and detoxifies. With Da Huang, for

constipation.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao and relieves Fire toxicity.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, induces sweating and expels Wind-Dampness. With Huang Bai, for skin lesions due to Wind-Dampness.

TREATS

Contact dermatitis. Red eyes. Purpura.

* RU AI XI JI - 乳癌洗剂 - Breast Cancer Wash (Topical)

ACTIONS - Expels Wind. Eliminates Dampness. Dispels Cold. Warms the channels. Reduces swelling.
Eliminates toxins. Expels pus. Alleviates pain. Inhibits the growth of cancer cells.

SYNDROMES - Toxic Heat with Wind-Cold Dampness.

CLINICAL MANIFESTATIONS - Tumor in the breast. Usually one side. Tumor is often the first symptom. Tumor is firm or hard. It starts small (bean-sized) and grows larger. Usually no pain. It is in a fixed location. The edges are uneven. Located in the center of the nipple or at the edge of the breast tissue. There is dimpling. The tumor gradually generates a dull pain. The pain becomes more severe. The nipple becomes retracted. The areola becomes distorted or a distorted breast contour. The breast becomes red and swollen. It becomes pitted like an orange. There are enlarged supraclavicular or axillary lymph nodes. Advanced nodules become ulcerated.

HERBS AND ACTIONS

-Bai Zhi - Expels Wind, eliminates Dampness, dispels Cold, reduces swelling, eliminates toxins, expels pus and alleviates pain.

-Ai Ye - Warms the channels, stops bleeding, disperses Cold, eliminates Dampness, stops itching, alleviates pain and inhibits the growth of cancer cells.

-Chi Shao - Cools and invigorates the Blood, dispels Blood Stasis, clears Heat, reduces swelling from sores and abscesses, relieves pain and inhibits the growth of cancer cells.

-Chuan Jiao (Hua Jiao) - Warms the Middle Jiao, disperses Cold, dispels Dampness and alleviates pain.

-Cong Bai - Disperses Cold, unblocks Yang, relieves toxicity and disperses clumps.

TREATS

Breast cancer with severe pain.

* SHI QUAN DA BU TANG - 十全大補湯 - All Inclusive Great Tonifying Decoction. Ten Complete Great Tonification Decoction. The Tonification Decoction with Ten Ingredients. Ginseng and Dang Gui Ten Combination

ACTIONS - Replenishes Yang. Warms and tonifies Qi and Blood.

SYNDROMES - Qi, Blood and Yang Deficiency with Cold. Atrophy (Wei Syndrome) due to Qi Deficiency.

CLINICAL MANIFESTATIONS - Anemia. Uterine bleeding. Cold extremities. Pale or sallow face. Dizziness. General fatigue. Coarse skin. Nocturnal emissions. Weak knees. Fatigue. Dyspnea. Night sweats. Irregular menstruation. Insomnia. Intolerance of Cold. Decreased eyesight after a prolonged illness. Anxiety. Intermittent fever. Jaundice. Deficient cough. Shortness of breath. Palpitations. Anorexia. Listlessness. Lassitude. Spontaneous sweating. Spermatorrhea. Continuous spotting. Leukorrhea. Weak legs and knees.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Heat or Excess disorders. This formula may have a marked protective effect against chemotherapy- and radiation-induced toxicities. This formula may have a marked protective effect against cyclophosphamide- or prednisone-induced immuno-suppression. This formula may have a marked protective effect against carboplatin- or cisplatin-induced myclosuppression. This formula may have a marked protective effect against cis-diamminedichloroplatinum-induced nephrotoxicity and bone marrow toxicity. This formula may have a marked protective effect against interferon toxicity. This formula may have a marked protective effect against rifampin-induced neutropenia.

HERBS AND ACTIONS

-Huang Qi - Strengthens the Spleen, tonifies Qi and nourishes Blood. With Ren Shen, for Qi Deficiency. With Bai Zhu, for Spleen Qi Deficiency. With Dang Gui, for Qi and Blood Deficiencies. With Dang Gui, Shu Di Huang, Ren Shen, Bai Zhu and Rou Gui, for flat sores that do not pustulate or ulcers that do not heal.

-Rou Gui - Warms Kidneys, strengthens Yang and assists the generation of Qi and Blood. With Huang Qi and Dang Gui, for Yin-type boils due to Qi and Blood Deficiencies especially those that form but do not ulcerate. With Dang Gui and Chuan Xiong, for dysmenorrhea, postpartum abdominal pain or amenorrhea due to Deficiency Cold of the Chong and Ren channels.

-Ren Shen - Tonifies Yuan Qi and Qi of the Spleen, Lungs and Heart. With Shu Di

Huang, for dysmenorrhea, postpartum abdominal pain or amenorrhea due to Deficiency Cold of the Chong and Ren channel. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu and Fu Ling, for Spleen and Stomach Qi Deficiencies with Dampness with anorexia, diarrhea, vomiting, abdominal distention and fatigue.

-Shu Di Huang - Tonifies the Blood, nourishes Yin, nourishes Jing and fills the Marrow. With Dang Gui and Bai Shao, for dizziness, palpitations, insomnia and menstrual dysfunction due to Blood Deficiency. With Dang Gui, Bai Shao and Chuan Xiong, for anemia. With Ren Shen, Bai Zhu, Fu Ling, Dang Gui and Bai Shao, for anemia with fatigue and weakness.

-Bai Zhu - Tonifies the Spleen, tonifies Qi, dries Dampness and promotes water metabolism. With Ren Shen and Huang Qi, for Restless fetus due to Qi Deficiency. With Shu Di Huang, Dang Gui and Bai Shao, for restless fetus due to Blood Deficiency, often with palpitations. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiencies. With Bai Shao, Shu Di Huang and Chuan Xiong, for menstrual irregularity, amenorrhea, and dysmenorrhea due to Blood Deficiency. With Fu Ling, Ren Shen and Huang Qi, for unstable pregnancy with severe Qi Deficiency.

-Dang Gui - Tonifies the Blood, regulates the menses, invigorates and harmonizes the Blood, moistens the Intestines, unblocks the bowels, reduces swelling, expels pus, generates flesh and alleviates pain. With Huang Qi, for Qi and Blood Deficiencies, pallor, debility, fatigue and/or low grade fever due to excessive blood loss and ulcerated abscesses with insufficient drainage or which drain a clear thin discharge. With Bai Shao, nourishes, regulates and harmonizes Qi and Blood. With Bai Shao, Shu Di Huang and Chuan Xiong, for menstrual irregularity, menorrhea, and dysmenorrhea due to Blood Deficiency or Blood Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Gan Cao, moderates spasms and relieves abdominal pain. With Bai Shao and Fu Ling, for diarrhea during pregnancy with mild abdominal pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. Qith Ren Shen, Bai Zhu, Shu Di Huang and Bai Shao, for general menstrual disorders with fatigue and weakness due to Qi and Blood Deficiencies.

-Bai Shao - Nourishes Blood and regulates menstruation. With Gan Cao, for muscle spasms, especially in the calf, due to Blood Deficiency.

-Chuan Xiong - Activates Blood and regulates Qi. With Rou Gui, for irregular menstruation with Cold in the Blood.

-Fu Ling - Promotes urination, resolves Dampness and strengthens the Spleen. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Gan Cao, for Spleen and Heart Deficiencies causing facial edema, palpitations, and shortness of breath.

-Gan Cao - Tonifies the Spleen, tonifies Qi and moderates and harmonizes the

properties of other herbs. With Ren Shen, relieves palpitations and anxiety.

TREATS

Chilblain. Uterine cancer. Menopause. Postpartum beriberi. Poliomyelitis. Bleeding hemorrhoids. Dental caries. Scrofula. Hypothyroidism. Leukemia. Rectocele. Nephroptosis. Osteoarthritis. Ulcers with a small amount of pus or no pus or pus with no tissue degeneration. Blood loss. Bloody dysentery. Nervous exhaustion. Chronic urticaria. Malaria. Chronic atrophic gastritis. Post-surgical recovery. Meniere's disease. Vascular Bi. Eczema. Infertility. Eyelid twitch. Dizziness. Atrophy (Wei) Syndrome. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Facial paralysis. Jaundice. Hypoglycemia. Food allergies. Chronic fatigue syndrome. Chronic bronchitis. COPD. Anxiety. Palpitations. Post illness debility. Vaginal discharge. Deafness. Thrombocytopenic purpura. Fatigue. Lateral epicondylitis. Spontaneous perspiration. Dyspnea. Postpartum fainting. Hypomenorrhea. Secondary dysmenorrhea. Thrombophlebitis. Dry hair. Carbuncles. Muscle spasms. Anemia. Uterine bleeding. Chronic abscess. Chronic asthma. Chronic cough. Post illness debility. Spermatorrhea. Nocturnal emissions. Leukorrhea. Decreased eyesight after prolonged illness. Underweight after prolonged illness. Cardiac failure. Cancer due to Qi and Blood Deficiencies. Fibromyalgia. Non-healing sores and ulcers. Postpartum recovery. Adjunctive for chemotherapy and radiation treatments. Neutropenia. Gastroptosis. Shwachman syndrome. Sheehan's syndrome. Habitual miscarriage. Amenorrhea. Insomnia. Vertigo. Progressive muscular dystrophy. The sequelae of poliomyelitis. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Stomach cancer. AIDS/HIV. Somnolence. Narcolepsy. Emphysema. Candidiasis. Addison's disease. Anorexia. Tinnitus. Neurosis. Forgetfulness. Hypotension. Lochiorrhea. Night sweats. Rectal prolapse. Dermatitis. Postpartum convulsions. Puerperal fever. Dry skin. Chemotherapy for breast cancer. Ear pain. Vaginal flatulence.

* SHU JIN TANG - 舒筋汤 - Smooth The Tendons, Relax The Muscles Decoction

ACTIONS - Dispels Wind-Cold-Damp. Stops pain. Relieves spasms.

SYNDROMES - Wind-Cold-Damp Bi with Wind-Damp Predominant.

CLINICAL MANIFESTATIONS - General pain. Painful extremities. Lumbago. Limitation of movement. Aversion to Wind and Damp. Heaviness of the body. Moving pain. Poor appetite. Loose stools or. Diarrhea.

HERBS AND ACTIONS

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels.

-Hai Tong Pi - Dispels Wind-Dampness, unblocks the channels and collaterals, promotes urination and reduces edema.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, reduces swelling and alleviates pain. With Gan Cao, moderates spasms.

-Bai Shao - Nourishes the Blood, astringes Yin, calms Liver Yang and Liver Wind and alleviates pain. With Gan Cao, for muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency. With Dang Gui, nourishes Yin and Blood.

-Jiang Huang - Invigorates the Blood, eliminates Blood Stasis, expels Wind and Reduces swelling. With Hai Tong Pi, Qiang Huo and Dang Gui, for Bi syndrome.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Gan Cao - Moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Low back pain.

* SI QI TANG - 四七汤 - Four Ingredient Decoction For The Seven Emotions

ACTIONS - Moves Qi. Descends Rebellious Qi. Transforms Phlegm. Harmonizes the Stomach. Disperses clumping.

SYNDROMES - Phlegm-Accumulation causing problems with any of the Seven Emotions.

CLINICAL MANIFESTATIONS - Anger. Fear. Fright. Depression. Obsession. Grief. Sadness. Melancholy.

NOTES - This formula is suitable for long-term use.

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, dissipates nodules and reduces Stagnation. With Fu Ling, for Phlegm, thin mucus and turbid Dampness. With Sheng Jiang, for vomiting due to Cold, thin mucus. With Hou Po, for Phlegm-Dampness with Qi Stagnation. With Hou Po, Zi Su Ye and Fu Ling, for Plum pit Qi Stagnation.

-Fu Ling - Quiets the Heart, calms the Spirit, soothes the nerves, promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Ban Xia, prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia.

-Zi Su Ye - Promotes the movement of Spleen and Stomach Qi. With Ban Xia and Hou Po, for Spleen and Stomach Qi Stagnation with Accumulation of Phlegm.

-Hou Po - Promotes the movement of Qi in the Middle Jiao, resolves Stagnation, descends Rebellious Qi, dries Dampness and transforms Phlegm. With Ban Xia and Fu Ling, for Phlegm Obstructing the Qi, leading to coughing, vomiting or a sense of something stuck in the throat.

-Sheng Jiang - Adjusts the Ying and Wei, normalizes the flow of Qi at the center and reduces the toxicity of other herbs. With Da Zao, protects the Stomach Qi and reduces irritation of the gastrointestinal tract by other herbs. With Ban Xia, for Phlegm-Dampness.

-Da Zao - Nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, prevents Phlegm Accumulation.

TREATS

Schizophrenia.

* TAO HE CHENG QI TANG - 桃核承氣湯 - Peach Pit Decoction To Order The Qi. Persica and Rhubarb Combination. Purgative Decoction of Persica Seed

ACTIONS - Drains Heat. Breaks up Blood Stasis.

SYNDROMES - Lower Jiao Blood Stagnation with Heat. Tai Yang - Shang Han with Blood Stagnation. Yang Ming Stage with Blood Stagnation. Traumatic injury with intractable pain and difficulty passing stool.

CLINICAL MANIFESTATIONS - Acute lower abdominal pain. Incontinence of urine. Night fevers. Delirious speech. Irritability. Restlessness. Thirst. May be mania (severe). Dysmenorrhea. Amenorrhea. Hard stool. Dark red complexion. Headache. Vertigo. Tinnitus. Insomnia. Palpitations. Constipation. Frequent urination. Emotional instability. Chills in the waist and feet. Afternoon fever. Tremors. Excruciating abdominal pain with cold. Black stool. May be chills and fever. Hemoptysis. Hematuria. Red eyes. Pain and distention of the head. Toothache. Irregular menstruation. Lochioschesis. Severe wheezing. Distention of the chest.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Exterior symptoms still present. Contraindicated during pregnancy. This formula is

recommended for treatment of menopausal symptoms induced by gonadotropin-releasing hormone agonists without a negative effect on serum estradiol levels.

HERBS AND ACTIONS

-Tao Ren - Breaks up Blood Stagnation, invigorates Blood circulation, moistens the Intestines and unblocks the bowels. With Da Huang, for Blood Stasis and Heat in the Lower Jiao.

-Da Huang - Attacks and purges accumulations, clears pathogenic Heat, drains Heat from the Blood, invigorates the Blood and dispels Blood Stasis. With Gui Zhi, for Blood Stasis (removes Stasis and unblocks the flow of Qi), combined Interior/Exterior conditions with chills, headache, fever, sweating and abdominal fullness and pain and abdominal fullness and pain as a result of purging an Exterior condition too soon.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the sinews and dispels retained Blood from the Lower Jiao, effectively unblocking the Blood in the vessels. With Tao Ren, breaks up and eliminates Blood Stasis.

-Mang Xiao - Purges accumulations, guides out Stagnation, softens hardness, clears Heat, drains Fire and moistens Dryness. With Da Huang, moving the stool, drains Heat and Eliminates Blood Stasis.

-Gan Cao - Protects the Stomach, Calms the Middle Jiao and moderates and harmonizes the harsh properties of other herbs.

TREATS

Acute endometriosis. Retained placenta. Acute pelvic inflammatory disease. Intestinal obstruction. Oophoritis. Habitual abortion. Stillbirth. Difficult childbirth. Cystitis. Cholelithiasis. Urolithiasis. Urethritis. Prostatitis. Prostamegaly. Seborrheic dermatitis. Exudative eczema. Urticaria. Acne. Athletes foot. Ringworm. Frostbite. Warts. Prolonged lochia. Ectopic pregnancy. Benign prostatic hypertrophy. Hemorrhagic fever with renal syndrome. Traumatic headache. Sequelae of brain trauma. Recalcitrant migraine. Schizophrenia. Epilepsy. Hordeolum. Brandy nose. Cerebrovascular disease. Varicose veins. Scarlet fever. Cholecystitis. Enteroparalysis. Pharyngitis. Diabetes mellitus. Climacteric disorders. Rheumatism. Hematuria. Metrorrhagia. Headache. Endometriosis. Kidney failure. Jaundice. Bladder cancer. Afternoon fever. Hemorrhoids. Amenorrhea. Enuresis. Palpitations. Liver cancer. Urinary incontinence. Red eyes. Blepharitis. Conjunctivitis. Pterygium. Retinitis. Hemophthalmia. Glaucoma. Conjunctival bleeding. Bleeding of the tongue. Gingivitis with bleeding. Intestinal bleeding. Bleeding of the anus. Uterine bleeding. Hypertension. Myocardial infarction. Habitual constipation. Arteriosclerosis. Pyorrhea. Neuralgia. Rheumatism. Uterine fibroids. Pelvic masses. Neurosis. Swellings. Uterine myoma. Post tubal ligation syndrome. Perimenopausal syndrome. Gonorrhea. Colitis. Cerebral contusion. Headache from

subarachnoid hemorrhage. Trigeminal neuralgia. Hysterical psychosis. Reactive psychosis. Erysipelas. Allergic purpura. Hepatitis. Pyelonephritis. Renal insufficiency. Renal colic. Endometritis. Hemoptysis. Pelvic cellulitis. Periodontitis. Insomnia. Stomach cancer. Oliguria. Hyperglycemia. Bi-polar disorder. Breast cancer. Tinnitus. Hemafecia. Dysmenorrhea. Low back pain. Puerperal fever. Toothache. Ulcerative colitis.

* TRICHOMONAS VAGINITIS WASH (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Eliminates Dampness. Kills parasites. Stops vaginal discharge.

SYNDROMES - Damp-Heat.

CLINICAL MANIFESTATIONS - Yellow vaginal discharge. Discharge is spongy and frothy. Discharge may cloudy or turbid. Discharge may be accompanied by a foul smell. Short, reddish urination. Intense vaginal itching which is difficult to bear.

HERBS AND ACTIONS

-Ku Shen - Disperses Wind, kills parasites and stops itching topically.

-She Chuang Zi - Dries Dampness, kills parasites and stops itching topically.

-Bai Bu - Expel parasites and kills lice. With Ku Shen, as an external wash for lice.

-Huang Lian - Clears Heat topically.

-Lang Du - Kills Intestinal parasites and alleviates pain.

TREATS

Trichomonas vaginitis.

* TUI CHI SAN - 退赤散 - Abate The Red Powder

ACTIONS - Clears Heat. Dispels Stasis.

SYNDROMES - Deep-Lying Heat in the Channels.

CLINICAL MANIFESTATIONS - Sparsely scattered fine vessels on the surface of the whites of the eyes. Slight tearing. Photophobia. Tearing. Slight itching and soreness of the eyes which is worse in the afternoon.

HERBS AND ACTIONS

-Sang Bai Pi - Drains Heat from the Lungs, stops coughing and calms wheezing. With Huang Qin, drains Heat from the Lungs and stops coughing and wheezing.

-Gan Cao - Clears Heat, relieves Fire toxicity, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Huang Qin - Drains Fire, resolves Dampness, detoxifies, cools the Blood, stops bleeding and calms ascending Liver Yang.

-Jie Geng - Opens and raises Lung Qi, directing the effects of other herbs to the upper body. With Gan Cao, for Excess disorders in the Upper Jiao with no disorder in the Lower Jiao.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, clears Deficiency Fire, invigorates the Blood, dispels Blood Stasis and clears Liver Fire.

-Tian Hua Fen - Drains Heat, generates Fluids, clears, drains Lung Heat, transforms Phlegm, moistens Lung Dryness, relieves toxicity, expels pus and reduces swelling.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat, cools the Blood, clears Liver Fire and relieves eye pain. With Mu Dan Pi, cools the Blood and disperses Stasis, for Ying Stage Heat with epistaxis, hemoptysis, hemafecia, hematuria, menorrhagia and skin rashes and Blood Stasis disorders.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, reduces swelling and alleviates pain.

-Gua Lou - Clears Heat, transforms Hot Phlegm and cools and moistens the Lungs.

TREATS

Red eyes.

1.3.3.19 RT-TCM-19

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_19

Candida #1, Fang Feng Tang Jia Jian, Gua Lou Gui Zhi Tang, Hemiplegia Bath #1, Huo Yu Tang, Run Chang Wan, Shu Jin San, Ti Gang Tang, Wang Qiu Zhou Tang

Recordings Updated in May 2025

* CANDIDA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Damp-Heat. Resolves toxins. Stops itching. Tonifies the Kidneys. Invigorates the Blood.

SYNDROMES - Damp-Heat in the Lower Jiao.

CLINICAL MANIFESTATIONS - Skin lesions with profuse fluid discharge. Fever. Thirst. Dry mouth with no desire to drink. Anorexia. Body heavy. Limbs tired. Fullness in chest. Lump in epigastrium. Leukorrhagia with thick, yellowish, foul discharge. Frequent, scanty, reddish urination.

HERBS AND ACTIONS

-Bai Xian Pi - Clears Damp-Heat and stops itching.

-Xu Chang Qing - Resolves toxins and stops itching.

-Yin Yang Huo - Tonifies the Kidneys and strengthens Yang.

-Bei Xie - Resolves turbid Dampness in the Lower Jiao and Clears Damp-Heat.

-Wang Bu Liu Xing - Promotes the movement of Blood and invigorates the channels.

TREATS

Candidiasis. Yeast infection.

* FANG FENG TANG JIA JIAN - 防風湯加減 - Modified Saposhnikvia Decoction

ACTIONS - Dispels Wind. Circulate Qi. Disperse Cold. Eliminate Dampness.

SYNDROMES - Wind Bi. Early stage Wind-Cold-Damp with preponderance of Wind.

CLINICAL MANIFESTATIONS - Wandering joint pain, especially wrists, elbows, knees and ankles. Limited movement. Chills and fever.

HERBS AND ACTIONS

-Fang Feng - Releases the exterior, expels External Wind, expels Wind-Dampness and alleviates pain. With Qin Jiao, for Wind Damp Bi with spasms of the tendons or numbness of the limbs and pain due to Wind-Dampness in patients with Blood

Deficiency. With Ma Huang, dispels Wind-Cold from the Exterior.

-Ma Huang - Induces sweating, releases the exterior, promotes urination, reduces edema and warms and disperses Cold pathogens.

-Dang Gui - Tonifies, activates and harmonizes the Blood, regulates the menses, disperses Cold and stops pain due to Blood Stasis.

-Qin Jiao - Expels Wind-Dampness, opens the channels and soothes the sinews and collaterals.

-Gen Gen - Discharges Exterior conditions. releases the muscles, especially of the neck and upper back, relieves Heat and generates fluids.

-Qiang Huo - Releases the Exterior, dispels Wind-Cold-Dampness from the upper Tai Yang, opens the channels, vitalizes vessels and stops pain. With Fang Feng for pain due to Wind- Damp.

-Jing Jie - Releases the Exterior, expels Wind, moves Qi, Regulates Blood and reduces swelling. With Fang Feng, for Exterior excess.

-Ji Xue Teng - Nourishes and invigorates the Blood, opens the channels and relaxes the sinews - good for numbness, low back pain and knee pain.

-Luo Shi Teng - Dispels Wind-Dampness and opens channels.

TREATS

Arthralgia. Painful obstruction. Chills. Common cold. Fever. Osteoarthritis.

* GUA LOU GUI ZHI TANG - 栝楼桂枝汤 - Trichosanthis And Cinnamon Twig Decoction

ACTIONS - Releases Wind-Cold from the muscle layer. Relaxes and moistens the sinews. Regulates the Ying and Wei.

SYNDROMES - Wind-Cold Attacking the Exterior with Deficiency of Ying and Wei with neck and shoulder stiffness and pain. Tai Yang Zhong Feng with neck and shoulder stiffness and pain.

CLINICAL MANIFESTATIONS - Neck pain and stiffness. Inhibited side to side turning. Fever and chills unrelieved by sweating. Decreased body resistance. Spontaneous perspiration. Rhinitis. Maybe body aches. Dry heaves. Headache. Muscles of the neck and back are very stiff and rigid. Aversion to Wind. Nasal congestion. No thirst.

HERBS AND ACTIONS

-Tian Hua Fen - Drains Lung Heat, transforms Phlegm, moistens Lung Dryness and generates Fluids.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei. With Gan Cao, for muscle spasms, pain and numbness due to Blood Deficiency. With Gui Zhi, harmonizes the Ying and Wei in Tai Yang Zhong Feng.

-Gan Cao - Moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, adjusts the Ying and Wei and normalizes the flow of Qi at the center. With Da Zao, for External Wind-Cold. With Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens.

-Da Zao - Nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, adjusts the Ying and Wei for treatment of Tai Yang Zhong Feng.

TREATS

Stiff neck.

* HEMIPLEGIA BATH #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Dispels Wind-Dampness. Invigorates the Blood. Breaks up Blood Stasis. Circulates Qi. Alleviates pain.

SYNDROMES - Hemiplegia.

CLINICAL MANIFESTATIONS - Atrophy. Paralysis of the limbs. Paralysis of the bladder and rectum.

HERBS AND ACTIONS

-Wei Ling Xian - Dispels Wind-Dampness.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Tou Gu Cao - Invigorates Blood circulation, breaks up Blood Stasis, reduces swelling, Dispels Wind and Dampness and relaxes the muscles and sinews.

-Gui Zhi - Releases the Exterior, assists Yang, releases the muscle layer, warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Chuan Xiong, expels Wind-Dampness, warms the channels and collaterals, facilitates joint movement and relieves the discomfort of painful obstruction.

-Fang Feng - Expels Wind-Dampness and alleviates pain.

-Lu Lu Tong - Promotes the movement of Qi and invigorates the Blood, expels Wind and unblocks the channels.

-Gan Jiang - Dispels Wind-Dampness and warms the channels.

-Da Huang - Invigorates the Blood, clears Heat and dispels Blood Stasis.

TREATS

Hemiplegia. Post-stroke paralysis.

* HUO YU TANG - 火雨汤 - Fire Depression Decoction

ACTIONS - Releases the Exterior. Vents measles. Clears Heat. Relieves toxicity. Raises Yang and lifts Sunken Qi. Spreads Liver Qi. Relieves Stagnation. Nourishes Blood.

SYNDROMES - Wind-Heat in the Exterior with measles. Five sole Heat due to Liver Stagnation.

CLINICAL MANIFESTATIONS - Fever and chills. Headache. Thirst. Sore throat. Abdominal pain due to disharmony between the Liver and Stomach. Epigastric, hypochondriac or flank pain. Muscle spasms, pain and numbness. Chronic dysenteric disorders. Rectal prolapse. Uterine prolapse. Vertigo. Dizziness. Thoracic and costal pain,. Menstrual irregularity. Five Sole Heat.

HERBS AND ACTIONS

-Sheng Ma - Releases the exterior, vents measles, clears Heat, relieves toxicity, raises Yang and lifts Sunken Qi. With Ge Gen, unblocks pores to vent rashes and treat Wind-Heat patterns in which Heat toxin has injured the Fluids of the Stomach with fever, chills, headache and thirst, for early-stage measles with incomplete expression of the rash with fever along with relatively superficial Yang Ming disorders. With Chai Hu, with other Wind-expelling, exterior releasing herbs to treat continuous fever, headache and sore throat from Wind-Heat patterns constrained in the muscle layer and chronic

dysenteric disorders, rectal prolapse, and uterine prolapse due to Yang Deficiency.

-Chai Hu - Resolves Shao Yang disorders, reduces fever (harmonizes the Exterior and Interior), spreads Liver Qi, relieves Stagnation,.raises Yang Qi (specifically the Clear Qi of the Stomach and Gallbladder), disperses Wind-Heat and resolves Phlegm and congestion. With Bai Shao, for Liver Blood Deficiency with Liver Qi Stagnation and vertigo, dizziness, thoracic and costal pain, and menstrual irregularity due to Liver Qi Stagnation. With Gan Cao, for hepatitis with upper right quadrant pain and Wind-Heat fever. With Ge Gen, for Wind-Heat with neck and shoulder pain.

-Ge Gen - Discharges Exterior conditions, releases the muscles, especially of the neck and upper back, relieves Heat, generates fluids (relieves thirst), vents and discharges measles, raises Spleen Yang, stops diarrhea and alleviates symptoms of hypertension. With Chai Hu, for exterior patterns where the the chills gradually improve while the fever gradually increases along with stiffening of the neck and upper back and absence of sweating.

-Bai Shao - Nourishes Blood, regulates menstruation, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind, alleviates pain and softens the Liver. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes sinews for abdominal pain due to disharmony between the Liver and Stomach, epigastric, hypochondriac or flank pain and muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency. With Chai Hu, for flank pain due to Liver Qi Stagnation.

-Fang Feng - Releases the exterior, expels External Wind, expels Wind-Dampness, alleviates pain, Expels Internal Wind, stops spasms, relieves diarrhea and stops bleeding.

-Cong Bai - Releases the exterior, induces sweating, disperses Cold, unblocks the Yang and relieves toxicity.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

TREATS

Measles. Early-stage measles with incomplete expression of the rash. Hepatitis with upper right quadrant pain. Oliguria. Chronic dysenteric disorders. Rectal prolapse. Uterine prolapse. Wind-Heat with neck and shoulder pain. Abdominal pain.

* RUN CHANG WAN - 潤腸丸 - Moisten The Intestines Pill. Moisten the Intestines Pill (from Master Shen's Book.) Pill for Lubricating the Intestines

ACTIONS - Moistens the Intestines. Promotes defecation. Invigorates the Blood. Disperses Wind.

SYNDROMES - Constipation (usually severe) due to Wind-Heat entering the Intestines and injuring the Spleen and Stomach. Constipation due to improper diet or overwork. Constipation due to combined Blood Deficiency, Blood Stasis and Internal Wind due to Blood Deficiency. Constipation due to Heat Attacking the Lungs and Intestines and consuming Body Fluids.

CLINICAL MANIFESTATIONS - Habitual constipation. Lusterless skin and nails. Dry mouth. Unquenchable thirst. Constipation in the elderly or weak individuals. Dizziness. Dry stools that are not difficult to pass. Palpitations. Lack of appetite. Lethargy.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution during pregnancy.

HERBS AND ACTIONS

-Da Huang - Drains Heat, purges accumulations, invigorates the Blood and dispels Blood Stasis.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, moistens the Intestines and unblocks the bowels.

-Qiang Huo - Releases the exterior and expels Wind.

-Tao Ren - Breaks up Blood Stasis, invigorates Blood circulation, moistens the Intestines and unblocks the bowels.

-Huo Ma Ren - Nourishes, moistens and lubricates the Intestines and nourishes the Yin. With Tao Ren and Dang Gui, for habitual constipation.

TREATS

Chronic constipation. Constipation in the initial stage of trauma to the lumbar vertebrae. Constipation as sequela to cerebrovascular accident. Constipation associated with hypertension. Dry skin. Constipation in anemic or elderly people. Constipation in association with prolapse of the lumbar intervertebral discs or compressed fracture of the intervertebral discs. Hemorrhoids.

* SHU JIN SAN - 舒筋散 - Relax The Sinews Powder

ACTIONS - Invigorate the Blood. Break up Stagnation.

SYNDROMES - Blood Stagnation.

CLINICAL MANIFESTATIONS - Lower back pain that is fixed, stabbing and /or severe. Pan is worse with pressure. Dark complexion. difficulty walking. In severe cases, movement is difficult and very painful with restricted range of motion. The pain may be worse in the evening and is unaffected by weather or temperature. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas. Varicose and spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots.

HERBS AND ACTIONS

-Yan Hu Suo - Invigorates the Blood, circulates Qi, stops pain and disperses extravasation.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens Yang and Ming Men Fire, disperses deep Cold, warms the channels, unblocks the channels and vessels, alleviates pain and assists in the generation of Qi and Blood.

-Du Zhong - Tonifies the Kidneys and Liver, tonifies Kidney Yang,strengthens the sinews and bones and aids the smooth flow of Qi and Blood.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels.

-Shan Yao - Tonifies Kidney Yin and astringes Jing.

TREATS

Low back pain.

* TI GANG TANG - 提肛汤 - Lift The Anus Decoction

ACTIONS - Tonifies Middle Jiao Qi. Benefits Qi. Raises Sunken Yang. Lifts prolapsed anus. Nourishes the Blood.

SYNDROMES - Central Qi Sinking with Qi and Blood Deficiency.

CLINICAL MANIFESTATIONS - Protruding hemorrhoids when defecating or when walking, coughing, sneezing or standing for a long time. Non-returning hemorrhoids unless assisted manually or by lying down. Discharge of pale-colored Blood. Forceless defecation. Frequent defecation or. Enduring diarrhea. Fatigue. Lassitude. Prolapse of one or more organs. Sallow complexion. Anorexia. Abdominal and epigastric distention after eating. Four limbs feel tired and heavy. Maybe acid regurgitation or vomiting. Loose stools. Shortness of breath. Dizziness. Palpitations. Insomnia. Dry skin. Dry hair. Poor memory. Paleness. Scanty periods.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, promotes the discharge of pus, generates flesh and expels toxins. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Sheng Ma, raises the Yang Qi of the Spleen, allowing turbid Yin to descend and be eliminated, treating chronic diarrhea, a dragging sensation in the abdomen, fatigue, shortness of breath, uterine bleeding and prolapses. With Bai Zhu and Sheng Ma, for Spleen Qi Sinking with rectal and/or uterine prolapse or excessive uterine bleeding.

-Sheng Ma - Raises Yang and lifts sunken Qi. With Bai Zhu, for Dai channel spasms manifested as dragging sensations in the lower body, usually accompanied by vaginal discharge.

-Dang Shen - Tonifies the Middle Jiao,augments Qi and nourishes the Blood. With Huang Qi, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweating. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Dang Gui - Tonifies, activates and harmonizes the Blood, moistens the Intestines, unblocks the bowels, reduces swelling, expels pus, generates flesh and alleviates pain. With Huang Qi, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesia. With Bai Shao, regulates and harmonizes Qi and Blood. With Chuan Xiong, harmonizes, nourishes and activates the Blood and disperses Blood Stasis.

-Bai Shao - Nourishes the Blood and regulates menstruation.

-Huai Hua - Cools the Blood and stops bleeding. With Di Yu, for hot, bleeding hemorrhoids or other Intestinal bleeding.

-Di Yu - Cools the Blood and stops bleeding.

-Chuan Xiong - Activates the Blood and promotes the movement of Qi. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses and amenorrhea.

TREATS

Hemorrhoids. Anal prolapse.

* WANG QIU ZHOU TANG - 网球肘汤 - Relieve Tennis Elbow Decoction

ACTIONS - Dispels Wind-Cold-Damp. Unblocks the collaterals. Invigorates the Blood. Breaks up Blood Stasis. Stops pain.

SYNDROMES - Wind-Cold-Damp with Blood Stagnation.

CLINICAL MANIFESTATIONS - Elbow pain. Diffuse distending pain or. Stabbing pain. Impaired strength of hand muscles. Limited movement. Pain worse at night. Aversion to Wind and Cold. Aversion to Damp weather. Pain alleviated by movement. Heaviness of the hand. Local tenderness on palpation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Heat Accumulation.

HERBS AND ACTIONS

-Sang Zhi - Dispels Wind-Dampness, unblocks the channels and collaterals, benefits the joints and stops spasms. With Gui Zhi, for pain in the upper extremities.

-Hai Feng Teng - Dispels Wind-Dampness, unblocks the channels, disperses Cold and stops pain. With Gui Zhi, for pain, impaired joint movement and spasms of the sinews due to Wind-Damp Bi.

-Ji Xue Teng - Invigorates and tonifies the Blood, activates the channels and relaxes the sinews.

-Xi Xian Cao - Dispels Wind-Dampness, strengthens the sinews and unblocks the channels and collaterals.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Bai Shao, for External Wind-Cold with disharmony between the Ying and Wei. ith Chuan Xiong, expels Wind-Dampness, warms the channels and collaterals, facilitates joint movement and relieves the discomfort of painful obstruction.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei and alleviates pain.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis and relieves pain.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain and reduces

swelling. With Ru Xiang, dredges the channels and collaterals to treat joint pain.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, activates the channels and alleviates pain. With Mo Yao, for Wind-Cold-Damp Bi with numbness throughout the body and unresponsive extremities.

TREATS

Lateral epicondylitis. Tennis elbow. Epitrochleitis. Elbow pain.

1.3.3.20 RT-TCM-20

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_20

Bu Fei Tang, Dang Gui Liu Huang Wan, Huang Lian Jie Du Tang Wu Wei Xiao Du Yin He Cai, Mi Tuo Seng San, Panarthralgia #2, Ren Shen Bai Du San, Shao Yao Gan Cao Fu Zi Tang, VaginalWash #2, Wu Tou Gui Zhi Tang

Recordings Updated in May 2025

* BU FEI TANG - 補肺湯 - Tonify The Lungs Decoction. Reinforce the Lungs Decoction. Astragalus and Aster Combination

ACTIONS - Augments Qi. Stabilizes the exterior. Resolves Phlegm.

SYNDROMES - Lung Qi Deficiency.

CLINICAL MANIFESTATIONS - Shortness of breath. Spontaneous perspiration. Occasional chills and fever. Cough. Wheezing with thin, scanty sputum. Low energy. Gasping. Apathy. A propensity to catch cold easily. Chest oppression. Weak and low voice. Dyspnea. Fatigue. Taciturnity. Intolerance of Cold. Pale face.

NOTES - At present, there are over fifteen formulas with this name. This is the most commonly used one.

HERBS AND ACTIONS

-Ren Shen - Tonifies Lung Qi and strongly tonifies Yuan Qi. With Huang Qi, tonifies Qi and strengthens Wei Qi for Qi Deficiency with general debility, anorexia, and

spontaneous sweat and Lung Qi Deficiency.

-Huang Qi - Tonifies Wei Qi, stabilizes the exterior and tonifies the Lungs.

-Shu Di Huang - Nourishes Yin and arrests cough and wheezing. With Wu Wei Zi, strengthens the lower body. With Ren Shen, for Qi and Yin Deficiencies.

-Wu Wei Zi - Tonifies Qi, astringes Jing, helps the Kidneys grasp Qi and astringes leakage of Lung Qi. With Huang Qi, for Yang Deficiency with spontaneous sweat.

-Zi Wan - Moistens the Lungs, stops cough and expels Phlegm. With Wu Wei Zi, for productive cough, wheezing and spontaneous perspiration. With Ren Shen, Huang Qi and Wu Wei Zi, for chronic cough due to Lung Deficiency.

-Sang Bai Pi - Drains Heat from the Lungs, descends Lung Qi and stops cough and wheezing.

TREATS

Cough. Pulmonary tuberculosis. Influenza. Emphysema. Polyuria. Asthma. Fever. Allergic sinusitis. Palpitations. Fatigue. Facial edema. Palpitations. Upper respiratory tract infection. Urinary incontinence. Common cold. Chronic bronchitis. Hay fever. Chronic obstructive pulmonary disease (COPD). AIDS/HIV. Allergic rhinitis. Nasal congestion. Weakness. Gasping. Enuresis. Spontaneous perspiration. Dyspnea. Coughing and asthma associated with AIDS/HIV.

* DANG GUI LIU HUANG WAN - 当归六黄汤 - Decoction Of Chinese Angelica And Six Yellow Ingredients. Tangkuei and Six-Yellow Decoction

ACTIONS - Nourishes Yin. Clears Heat. Stabilizes the Exterior. Stops sweating.

SYNDROMES - Kidney and Liver Yin Deficiency Fire with Blood Deficiency.

CLINICAL MANIFESTATIONS - Fever. Night sweats. Red face. Dry mouth. Leukorrhagia with yellow, thick, foul discharge. Constipation. Dark, scanty urine. Irritation. Fidgeting. Insomnia. Five Sole Heat. Irregular menstruation. A thin physique. Nocturnal emissions. Parched lips. Irritability. Dry stools.

HERBS AND ACTIONS

-Dang Gui - Tonifies the Blood, regulates menses and invigorates and harmonizes the Blood.

-Di Huang - Clears Heat, cools the Blood, nourishes the Yin and generates fluids. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Shu Di Huang - Tonifies the Blood and Yin.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and relieves toxicity.

-Huang Qin - Clears Lung Heat, dries Dampness drains Fire, detoxifies and calms ascending Liver Yang. With Huang Lian, for high fever and irritability in warm-febrile disease.

-Huang Bai - Drains Damp-Heat, drains Kidney Fire and relieves toxicity.

-Huang Qi - Strengthens the Spleen, tonifies Qi, generates Body Fluids, raises the Yang Qi of the Spleen and Stomach, nourishes Blood, promotes urination, reduces edema and expels toxins. With Dang Gui, for Qi and Blood Deficiency. With Huang Bai and Di Huang, for Yin Deficiency with night sweats.

TREATS

Lung consumption. Steaming bone disorder. Post febrile disease. Chronic epistaxis. Hyperthyroidism. Pulmonary tuberculosis. Chronic hepatitis. Viral hepatitis. Silicosis. Myocarditis. Insomnia. Abnormal perspiration. COPD. Allergic purpura. Herpes zoster. Night sweats. Indigestion. Metrorrhagia. Chronic bronchitis. Cholecystitis. Nephritis. Urinary tract infection. Neurasthenia. Osteomyelitis. Leukemia. Cervicitis. Hectic fever. Thrombocytopenic purpura. Menopause. Constipation. Herpes simplex. Hypertension. Nocturnal emissions. Strangury.

* HUANG LIAN JIE DU TANG WU WEI XIAO DU YIN HE CAI - 黃連解毒湯五味消毒飲合彩 - Combined Coptis Decoction To Relieve Toxin And Five-ingredient Decoction To Eliminate Toxin

ACTIONS - Cools Blood. Clears Heat. Relieves Toxin.

SYNDROMES - Fire/Heat Toxin induced psoriasis.

CLINICAL MANIFESTATIONS - Lesions develop and spread quickly. Lesions often coalesce together. Lesions are covered by fine scales that shed easily Itching. Burning Pain. High fever. Yellow urine. Thirst. Dry stools.

HERBS AND ACTIONS

-Pu Gong Ying - Clears Heat and resolves Dampness. With Jin Yin Hua, for all hot, painful, hard, and deep-rooted boils.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity, vents and disperses External Wind-Heat and clears Damp-Heat from the Lower Jiao. With Jin Yin Hua, for suppurating boils

that have not ulcerated, or have ulcerated but are not discharging pus.

-Zi Hua Di Ding - Clears Heat, relieves Fire toxicity and clears Hot sores. With Pu Gong Ying, for breast abscesses, furuncles, boils, carbuncles and Damp-Heat jaundice.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and relieves toxicity. With Huang Qin and Zhi Zi, for high fever, irritability, dry mouth and throat, and dark urine due to Fire toxin in the three burners. With Di Huang, for insomnia and delirium due to unremitting Heat injuring the Ying level.

-Huang Qin - Clears Heat, resolves Fire toxins, invigorates the Blood, reduces swellings, promotes urination and reduces edema.

-Huang Bai - Drains Damp-Heat, especially from the Lower Jiao, drains Deficiency Fire, drains Fire and relieves toxicity.

-Zhi Zi Tan - Clears Heat, reduces Fire, drains Damp-Heat, cools Blood and relieves toxicity.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Chi Shao - Clears Heat, cools the Blood, activates Blood and dispels Blood Stasis.

TREATS

Psoriasis due to Fire/Heat Toxin. Allergic dermatitis.

* MI TUO SENG SAN - 密陀僧散 - Lithargyum Powder (Topical)

ACTIONS - Dispels Wind-Dampness. Kills parasites. Stops itching.

SYNDROMES - Wind-Damp.

CLINICAL MANIFESTATIONS - Itching. Weeping skin lesions.

HERBS AND ACTIONS

-Liu Huang - Relieves toxicity, kills parasites and stops itching.

-Xiong Huang - Relieves toxicity and kills parasites topically.

-She Chuang Zi - Dries Dampness, kills parasites and stops itching topically. With Qing Fen, for Itching, weeping skin lesions due to flare-ups of chronic eczema, genital eczema or scabies. With Ming Fan, Liu Huang and Xiong Huang, for weeping skin lesions.

-Mi Tuo Seng - Eliminates toxins and kills parasites topically. With Xiong Huang and Liu Huang, for Severe underarm odor, tinea versicolor, vitiligo, scabies, eczema and pemphigus. With Qing Fen, for general dermatological disorders.

-Ming Fan - Relieves toxicity, dries Dampness, kills parasites, alleviates itching, restrains and inhibits sores, generates flesh and transforms putrefication. With She Chuang Zi, for intense itching of eczema, chronic vaginal discharge, damp scrotum and other pruritic disorders. With Xiong Huang, for Wind-Damp-Heat toxin in the muscles and skin with severe itching that results in a yellow exudate after scratching. With Liu Huang, topically as a powder for scabies.

-Qing Fen - Resolves toxicity, strongly kills parasites, generates flesh, promotes the healing of sores and expels water.

TREATS

Lupus erythematosis. Vitiligo tragomaschalia. Eczema. Dermatomycosis microsporina. Tinea versicolor. Scabies.

* PANARTHRALGIA #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Promotes Qi movement. Unblocks the Channels. Alleviates pain. Expels Wind-Dampness. Disperses Cold. Warms and activates the Channels. Resolves toxicity. Reduces swellings. Invigorates the Blood. Drains water downward. Eliminates congested fluids and thin mucus. Clears Heat.

SYNDROMES - Joint pain as intense as a tiger bite with scary pain in the bones and joints.

CLINICAL MANIFESTATIONS - Joint pain as intense as a tiger bite with scary pain in the bones and joints.

HERBS AND ACTIONS

-Bai Jie Zi - Warms the Lungs, expels Phlegm, promotes Qi movement, dissipates nodules, unblocks the collaterals and alleviates pain.

-Mu Bie Zi - Resolves toxicity, reduces swellings and invigorates the Blood.

-Gan Sui - Drains water downward and eliminates congested fluids and thin mucus Clears Heat, reduces swelling and disperses hardenings

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, activates the channels and alleviates pain.

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

TREATS

Panarthralgia.

* REN SHEN BAI DU SAN - 人参败毒丸 - Ginseng Powder To Overcome Pathogenic Influences. Ginseng and Mentha Formula. Antiphlogistic Powder of Ginseng. Bai Du San

ACTIONS - Releases the Exterior. Augments Qi. Removes Wind-Cold-Damp. Eliminates Painful Obstruction. Circulates Qi and Blood. Stops pain.

SYNDROMES - Wind-Cold-Dampness with Deficient normal Qi. Wind-Cold-Damp Bi. Muscular atrophy due to Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - High fever accompanied by severe chills and shivering. Aversion to Cold. Pain worse at night. Difficult movement. Local inflammation. Migratory pain. Soreness and pain of the extremities. Nasal congestion with sonorous breathing. Anhidrosis. Pain and stiffness of the head and neck. Focal distention and fullness of the chest and diaphragm. A productive cough. May have numbness and heaviness in the limbs. Body aches. Nasal obstruction. Cough with sputum. Stuffy nose. Joint pain. Pain worse with Cold and better with warmth. Pain aggravated by Wind. Pain aggravated by Dampness. Pain is stabbing. Muscle weakness. Pain alleviated by movement. Slight muscle edema. Heaviness of the joints. Cold joints. Headache. Dizziness.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat in the channels. Contraindicated for those with Exterior Wind-Heat. Contraindicated for those with Internal Heat. Contraindicated for those with Yin Deficiency with Exterior Invasion. Contraindicated for those with a strong constitution.

NOTES - This formula warms without drying. This formula unblocks without causing damage. This formula has a stronger Wind relieving and pathogen expelling action than Juan Bi Tang.

HERBS AND ACTIONS

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Du Huo, expels Wind-Cold from the exterior, dispels Dampness and alleviates pain. Qiang Huo is better for superficial Wind-Dampness and upper extremities and Du Huo is better for deeper Wind-Dampness and lower extremities. With Chuan Xiong, for headache and generalized body aches and pains associated with the common cold or painful obstruction. With Jie

Geng, for skin conditions.

-Du Huo - Disperses Wind-Cold-Dampness, opens the channels and alleviates pain. With Qiang Huo, for joint pain and numbness.

-Chuan Xiong - Regulates Qi, helps Qiang Huo and Du Huo release the exterior, moves Blood, expels Wind-Cold, enhancing the pain relieving function of the formula (especially in the head and neck) and treats headaches.

-Chai Hu - Expels Wind-Heat, raises Yang Qi, and resolves Phlegm and congestion. With Bo He, releases the exterior, reduces fever, and expels the pathogenic influences, especially from the muscle layer. With Zhi Ke, for Stifling sensation in the chest, abdominal pain, poor appetite, and irregular bowel movements. With Gan Cao, for Wind-Heat fever.

-Jie Geng - Opens the Lungs, expels Phlegm, expels pus, benefits the throat and directs the effects of other herbs to the upper body. With Zhi Ke regulates the Qi flow in the chest. With Zhi Ke and Qian Hu, improves Lung Qi circulation, expels Phlegm and stops cough. With Gan Cao, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat and Lung abscess with expectoration of pus and pain in the chest and flanks and for Excess disorders in the Upper Jiao with no disorder in the Lower Jiao.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure, resolves hardenings and removes stagnated food. With Chai Hu and Bo He, for Upper Jiao surface Heat problems. With Jie Geng, regulates the flow of Qi in the chest and aids in the transformation of Phlegm for chest congestion.

-Qian Hu - Descends Qi, expels Phlegm and expels Wind-Heat. With Fu Ling and Sheng Jiang, treats the manifestation and root. With Jie Geng and Bo He, for symptoms of Wind-Heat. With Chai Hu, for Wind-Heat constraining the Lungs, leading to a stifling sensation in the chest and cough with profuse sputum.

-Ren Shen - Strengthens Qi to expel pathogenic influences, generates fluids to produce sweat, and strengthens the body's resistance to invasion, preventing a relapse. With Chai Hu, Chuan Xiong, Sheng Jiang and Bo He, moves Qi and expels external pathogens. With Qiang Huo, Chai Hu and Du Huo, for Exterior invasion with Interior Deficiency.

-Fu Ling - Transforms Phlegm, strengthens the Spleen, leaches out Dampness and promotes urination. With Qian Hu, Jie Geng and Zhi Ke, resolves Phlegm and stops cough. With Gan Cao, for Spleen and Heart Deficiencies causing facial edema, palpitations, and shortness of breath.

-Gan Cao - Assists Ren Shen in tonifying Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the

harsh properties of other herbs. With Jie Geng, for pain and swelling of the throat. With Ren Shen, relieves palpitations and anxiety.

-Sheng Jiang - Releases the exterior, warms the Lungs, disperses Cold, stops cough and reduces the toxicity of other herbs. With Da Zao, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen, prevents Phlegm accumulation and treats External Wind-Cold.

-Bo He - Disperses Wind-Heat, vents rashes, clears the head and eyes and benefits the throat.

TREATS

Common cold. High fever. Mumps. Dysentery. Early stages of boils. Eczema. Influenza. Bronchitis. Allergic dermatitis. Upper respiratory tract infection with fever. Nasal congestion. Rheumatism. Eye disorders. Ulcers. Early-stage carbuncle. Cough. Neuralgia. Weakness. Arthralgia. Neck stiffness. Urticaria. Rheumatic arthritis. Chronic lumbago. Arthralgia. Osteoarthritis. Rheumatoid arthritis. Gouty arthritis. Bursitis. Hoarseness. Suppurative infection. Acute viral hepatitis. Malaria. Diarrhea. Dizziness. Nasal obstruction. Pneumonia. Herpes genitalia. Headache. Puerperal fever.

* SHAO YAO GAN CAO FU ZI TANG - 芍药甘草附子汤 - Peony, Licorice And Aconite Decoction

ACTIONS - Softens the Liver. Warms Yang. Benefits Yin. Moderates painful spasms. Relieves pain. Harmonizes the Middle Jiao.

SYNDROMES - Acute cramping due to Yang Deficiency. Shang Han Tai Yang which shows Yang Deficiency symptoms after diaphoresis.

CLINICAL MANIFESTATIONS - Acute muscular cramping. Cold limbs. Fear of Cold. Chills. Convulsions. Anxiety. Back spasms. Knee spasms. Spasms around the waist. Spasms of the gastrocnemius. Sciatica. Low back pain. Stiff shoulders. Pain on urination.

HERBS AND ACTIONS

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach and epigastric, hypochondriac or flank pain.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs.

-Fu Zi - Warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold

and Dampness, warms the channels and stops pain.

TREATS

Acute muscular cramping. Sciatica. Muscular rheumatism. Intestinal hernia. Biliary colic. Renal colic. Hemorrhoidal colic. Low back pain.

* VAGINAL WASH #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Fire. Relieves toxicity. Kills parasites. Stops itching. Alleviates pain.

SYNDROMES - Vaginal ulcerations and erosions.

CLINICAL MANIFESTATIONS - Ulcerations. Erosions.

HERBS AND ACTIONS

-Ku Shen - Disperses Wind, kills parasites and stops itching topically. With Huang Bai and She Chuang Zi, as an herbal wash for general itching or vaginitis due to trichomonas infection. With Huang Bai, She Chuang Zi and Ming Fan, for skin itching with lesions and abscesses topically.

-She Chuang Zi - Dries Dampness, kills parasites and stops itching topically. With Ming Fan and Huang Bai, as a vaginal suppository for itching associated with trichomoniasis. With Ku Shen, for itchy, weeping skin lesions.

-He Shi - Kills parasites and alleviates pain. With Ku Shen, Bai Bu and She Chuang Zi, as a steam and wash for vaginal itching.

-Bai Bu - Expel parasites and kills lice. With Ku Shen, as an external wash for lice.

-Huang Bai - Drains Fire and relieves Fire toxicity topically.

-Ming Fan - Restrains and inhibits sores, generates flesh and transforms putrefication topically. With She Chuang Zi, as an external wash for chronic vaginal discharge with itching and eczema and as a wash for genital itching due to vaginal candidiasis in women. With Bai Bu, as an external wash for eczema.

-Xiong Huang - Relieves toxicity and kills parasites. With Ming Fan, for sores with redness, swelling, itching and pain topically.

TREATS

Vaginal discharge.

* WU TOU GUI ZHI TANG - 烏頭桂枝湯 - Aconite And Cinnamon Twig Combination. Wu Tou and Cinnamon Combination. Decoction of Aconiti and Ramulus Cinnamomi

ACTIONS - Warms the Interior. Reinforces Yang. Releases the Exterior. Regulates the Ying and Wei.

SYNDROMES - Interior Cold due to Yang Deficiency with Wind-Cold Invasion giving rise to Cold-Type Bulging Disorder (hernia). Retention of Cold-Dampness in the Interior with Attack of Wind-Cold. Jue Yin Cold.

CLINICAL MANIFESTATIONS - Abdominal pain. Cold extremities. Numb hands and feet. Generalized body aches. Paralysis of the extremities. Induration and swelling of the scrotum. Hypersalivation. Limited movement of the joints. Abdominal pain referring to the testis. Aversion to Cold. A preference for Warmth. Loose stools. Chills and fever.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Because of the potency of this formula, stop it as soon as it takes effect.

HERBS AND ACTIONS

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain, unblocks Yang and transforms the Qi and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Bai Shao, for External Wind-Cold with disharmony between the Ying and Wei (Tai Yang Zhong Feng), with spontaneous sweating, fever and chills.

-Sheng Jiang - Releases the Exterior, induces perspiration and disperses Cold. With Da Zao, for External Wind-Cold and protects the Stomach Qi and reduces irritation of the gastrointestinal tract by other herbs. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis. with Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens.

-Bai Shao - Calms Liver Yang and Liver Wind and alleviates pain for Bi syndrome due to Blood Deficiency with pain and spasms. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs.

-Gan Cao - Moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen

TREATS

Hernia. Tumors of the spine. Gangrene with somatic and limb chills or weakness with severe pain. Gallstones. Ascariasis leading to chills and aching. Myelitis. Hydrocele of the tunica vaginalis. Rheumatic arthritis. Tuberculous arthritis. Abdominal pain. Sciatica. Acute and chronic appendicitis. Chronic Intestinal stenosis. Gastric ulcers. Chronic pancreatitis. Neuralgia. Arthritis. Rheumatism. Severe arthralgia that is relieved by Warmth and aggravated by Cold. Peritoneal adhesion. Periostitis. Paralysis of the extremities.

1.3.3.21 RT-TCM-21

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_21

An Shen Bu Xin Wan, Ectopic Pregnancy #5, Neurasthenia #4, Qing Hun San, Shu Gan Tang, Tong Qiao Huo Xue Tang, Wu Pi San, Wu Wei Zi Tang, Xiao Yan Tong Mai He Ji

Recordings Updated in May 2025

* AN SHEN BU XIN WAN - 安神補心丸 - Calm The Spirit And Tonify The Heart

ACTIONS - Acts as a sedative and has adaptogenic properties. Enrich the Yin. Nourish the Blood. Tonify the Heart. Calm the Shen. Clear Heat. Augment Qi. Restores the Pulse.

SYNDROMES - Yin And Blood Deficiencies.

CLINICAL MANIFESTATIONS - An ill-defined medical condition characterized by lassitude, fatigue, headache and irritability, associated chiefly with emotional disturbance.

NOTES - This is one of the most reliable and effective formula to provide relief from occasional sleeplessness. By supporting the health of the heart, the inner ear and circulatory system, it is effective in relieving nervous tension and stress. It also is believed to be beneficial in supporting heart health. Helps to calm stress and tension and support normal sleeping cycle. Nourish the heart Yin and blood, while it anchors the Liver Yang. The rehmannia root is effective in nourishing the heart's blood and for reducing incidents of sleeplessness and supporting heart health.

HERBS AND ACTIONS

-Zhen Zhu - Sedates the Heart and settles tremors and palpitations. Clears the Liver and eliminates superficial visual obstructions.

-He Shou Wu - Tonifies the Liver and Kidneys, nourishes the Blood and nourishes Jing.

-Nu Zhen Zi - Nourishes and tonifies Liver and Kidney Yin. Clears Deficiency Heat.

-Dan Shen - Invigorates the Blood and dispels Blood Stasis. Clears Heat and soothes irritability. Nourishes the Blood and calms the Spirit.

-He Huan Pi - Regulates Qi. Calms the Spirit and relieves constraint. Invigorates and harmonizes the Blood, stops pain and reconnects sinews and bones.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine and benefits the marrow. Tonifies the Kidneys and Liver. Benefits the Kidneys and Spleen.

-Mo Han Lian - Nourishes and tonifies Liver and Kidney Yin.

-Di Huang - Clears Heat and cools the Blood. Nourishes Yin. Cools Heart Fire.

-Wu Wei Zi - Tonifies the Kidneys, binds up Essence (astringes Jing). Quiets the Spirit and calms and contains Heart Qi. Tonifies Qi.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm, removes filth, calms the Spirit and disperses Wind. Transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen and promotes the movement of Qi. Promotes Blood flow, reduces swelling and alleviates Wind-Damp Bi.

TREATS

Neurasthenia.

* ECTOPIC PREGNANCY #5

ACTIONS - Invigorates the Blood. Removes Blood Stasis. Tonifies Yang. Tonifies Qi. Restores from collapse.

SYNDROMES - Qi and Tang Deficiency.

CLINICAL MANIFESTATIONS - Abrupt pain in the lower abdomen. Tenderness. Pallor. Cold limbs. Profuse cold sweat. Irritability. Low Blood pressure.

HERBS AND ACTIONS

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain clears Heat and cools the Blood. With Tao Ren, for Blood Stasis induced menstrual disorders, especially those characterized by early period, excessive bleeding and thick purple clots.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, cools the Blood and reduces abscesses.

-Tao Ren - Breaks up Blood Stasis, invigorates Blood circulation and drains abscesses.

-Fu Zi - Restores Devastated Yang, rescues from collapse, disperses Cold and Dampness, warms the channels and stops pain.

-Ren Shen - Tonifies Qi. With Fu Zi, for collapsed Qi and Devastated Yang with spontaneous sweat, ice cold extremities and shortness of breath. With Wu Wei Zi and Mai Dong, for Qi and Yin Deficiency with shortness of breath and spontaneous sweat usually secondary to injury from Heat.

-Mai Dong - Nourishes Yin and generates Fluids

-Wu Wei Zi - Astringes sweat, generates fluids and tonifies Qi.

TREATS

Ectopic pregnancy: ruptured, shock type.

* NEURASTHENIA #4

ACTIONS - Tonifies Qi. Nourishes the Blood. Calms the Shen.

SYNDROMES - Qi and Blood Deficiency.

CLINICAL MANIFESTATIONS - Palpitations. Insomnia. Much dreaming. Wakes early. Sleepiness during the day. Easily startled. Lack of energy. Poor memory. Four limbs tired and lethargic. Distention and fullness of the epigastrium and abdomen. Loss of appetite. Loose stools or. Diarrhea. Sallow complexion. Copious, pale menses. Uterine bleeding or. Light menstrual flow or. Amenorrhea.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Jing and Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Dang Shen, for Qi and Blood Deficiency.

-Dang Shen - Tonifies the Middle Jiao,augments Qi and nourishes the Blood. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting. With Dang Gui and Shu Di Huang, for Qi and Blood Deficiency with dizziness, weakness and lassitude. With Huang Qi, for Lung and Spleen Qi Deficiency with fatigue, shortness of breath, diarrhea and anorexia.

-Huang Qi - Tonifies Qi and Blood. With Dang Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweating. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Long Yan Rou, Dang Gui and Suan Zao Ren, for insomnia and other signs of Qi and Blood Deficiency. With Dang Gui, for fatigue, low grade fever, irritability and thirst in patients with a weak pulse due to Qi and Blood Deficiency.

-Dang Gui - Tonifies, activates and harmonizes the Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Wu Wei Zi - Tonifies Qi, tonifies the Kidneys, astringes Jing, quiets the Shen and calms and contains Heart Qi. With Huang Qi, for Yang Deficiency with spontaneous sweat.

-Suan Zao Ren - Nourishes Heart Yin, tonifies Liver Blood, calms the Shen, astringes sweat and generates fluids. With Dang Shen, Dang Gui, Long Yan Rou and Huang Qi, for Shen disturbance due to Spleen and Heart Deficiencies. With Wu Wei Zi, Dang Shen and Huang Qi, for spontaneous sweating.

-Long Yan Rou - Tonifies and augments the Heart and Spleen, nourishes the Blood and calms the Shen. With Dang Gui, Dang Shen, Suan Zao Ren and Huang Qi, for palpitations and insomnia due to Heart Blood Deficiency especially in cases with Spleen Qi Deficiency. With Huang Qi and Dang Shen, for Qi and Blood Deficiency.

TREATS

Neurasthenia.

* QING HUN SAN - 青魂散 - Clear The Hun Powder

ACTIONS - Invigorates the Blood. Moves Qi.

SYNDROMES - Postpartum Blood Stagnation.

CLINICAL MANIFESTATIONS - Dizziness. Vertigo. Palpitations. Amenorrhea with distention and pain. Dysmenorrhea. A stubborn headache that is fixed and boring. Forgetfulness. Sinus congestion. Constipation. Excess weight in the pelvis. Lower back

ache. Irregular menstruation. Nervousness. Mild, persistent uterine bleeding of purple and black blood during pregnancy. Abdominal pain that is worse with pressure. Abdominal spasms and tension. Immobile masses in the lower abdomen with pain and tenderness. Fatigue. Depression. Low spirits. irritability. Mood swings. Dar or purplish lips. Spider naevi on the face and nose. Fetal instability. Skin eruptions. Scanty menstrual flow. Scaly, dry skin. Retention of lochia. Insomnia. Restless sleep. Shoulder stiffness. Cold low body and feet. Flushed face. Protruding abdomen.

HERBS AND ACTIONS

-Ren Shen - Tonifies Heart Qi and calms the Spirit.

-Jing Jie - Releases the Exterior, dispels Wind and relieves postpartum muscle spasms.

-Ze Lan - Invigorates the Blood and dispels Blood Stasis. With Chuan Xiong, for pain due to trauma, dysmenorrhea, and amenorrhea.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Dizziness. Vertigo. Post concussion syndrome. Amenorrhea. Palpitations. Vaginal bleeding during pregnancy. Chronic migraine. Post traumatic shock syndrome. Chronic depression. Fatigue. Postpartum fainting. Dry skin.

* SHU GAN TANG - 舒肝湯 - Dredge The Liver Decoction. Spread the Liver Decoction. Bupleurum and Evodia Combination

ACTIONS - Dredges the Liver. Regulates the Qi. Dispels Stasis. Opens the channels and collaterals. Relieves pain. Activates the Blood. Clears Heat.

SYNDROMES - Pain in the Liver channel due to Qi and Blood Stagnation.

CLINICAL MANIFESTATIONS - Pain beneath the left side of the rib cage. Rib pain from trauma. Alternating chills and fever. Hypochondriac fullness and pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not use this formula for those who do not present with Liver Stagnation or pain from Blood Stasis. Use caution if Internal bleeding is suspected.

NOTES - The symptoms may be brought on by internal damage from emotions or as

the result of trauma.

HERBS AND ACTIONS

-Huang Lian - Clears Damp-Heat at the Qi Level with diarrhea and nausea or Liver Stomach Disharmony causing Liver Fire with acid regurgitation, belching or nausea.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Bai Shao, for Liver Blood Deficiency with Liver Qi Stagnation and vertigo, dizziness, thoracic and costal pain, and menstrual irregularity due to Liver Qi Stagnation. With Bai Shao, Dang Gui and Chuan Xiong, harmonizes the Blood for irregular menstruation. With Zhi Ke, for a stifling sensation in the chest, abdominal pain, poor appetite, and irregular bowel movements. With Bai Shao, Chuan Xiong and Zhi Ke, for Liver Qi Stagnation with hypochondriac fullness and pain.

-Dang Gui - Tonifies Blood, regulates the menses, invigorates and harmonizes the Blood and disperses Cold (stops pain due to Blood Stasis). With Tao Ren and Hong Hua, for amenorrhea, pain, swelling and other symptoms associated with Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood. With Chai Hu and Bai Shao, for dysmenorrhea from Liver Qi Stagnation and Blood Deficiency. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood, disperses Blood Stasis and treats abdominal pain.

-Qing Pi - Spreads Liver Qi and breaks up Stagnant Qi. With Chai Hu, restores the Qi circulation between the Upper and Lower Jiaos to treat long-term Qi Stagnation moving to Blood Stasis with fixed pain and occasional palpable lumps.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Hong Hua, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea with abdominal pain, clotting and scanty flow, swollen painful sores and chest pain due to Blood Stasis.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure and resolves hardenings.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With Dang Gui, Tao Ren and Hong Hua, for abdominal pain accompanying menstruation, pain due to trauma and headache from Blood Stagnation. With Dang Gui, Tao Ren, Bai Shao and Hong Hua, for dysmenorrhea due to Blood Stasis. With Tao Ren, Hong Hua, Chai Hu and Dang Gui, for sharp stabbing pains in the chest and hypochondriac area due to Blood Stagnation.

-Bai Shao - Nourishes Blood, softens the Liver and relieves pain. With Chai Hu, for flank pain due to Liver Qi Stagnation. With Dang Gui, nourishes Yin and Blood.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks

menstruation and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

TREATS

Intercostal neuralgia. Pancreatitis. Acid reflux. Irregular menstruation. Stomach cancer. Indigestion. Traumatic injury to the ribs. Obesity. Breast cancer. Irritable bowel syndrome. Dizziness.

* TONG QIAO HUO XUE TANG - 通竅活血汤 - Open The Portals And Quicken The Blood Decoction. Unblock the Orifices and Invigorate the Blood Pills. Decoction to Invigorate the Blood Circulation and Open the Orifices. Decoction for Activating Blood Circulation. Persica and Musk Combination

ACTIONS - Invigorates the Blood. Dispels Blood Stasis. Opens the orifices.

SYNDROMES - Blood Stasis in the head, face and upper body. Childhood nutritional impairment.

CLINICAL MANIFESTATIONS - Headache. Vertigo. Chronic tinnitus. Hair loss. Dark purple complexion or. Blue or green facial complexion with or without rosacea or vitiligo. Darkness around the eyes. Brandy nose. Progressive emaciation. Abdominal distention. Purplish discoloration of the sinews. Tidal fever. Dizziness. Deafness. Pale face. Cyanosis. Phthisis. Muscle weakness. Sudden loss of vision.

HERBS AND ACTIONS

-Chi Shao - Invigorates the Blood, dispels Stasis, clears Heat and cools the Blood. With Chuan Xiong for abscesses, boils and trauma induced pain. With Tao Ren, Hong Hua and Chuan Xiong, for Blood Stagnation in the chest.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis and stops pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis. With Tao Ren, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain.

-Chuan Xiong - Invigorates the Blood, moves Qi, expels Wind and stops pain. With Hong Hua for Blood Stasis in the chest.

-Tao Ren - Breaks up Blood Stasis. With Hong Hua, for Rheumatoid arthritis.

-Cong Bai - Releases the exterior, induces sweat, disperses Cold, unblocks the Yang, relieves toxicity and disperses clumps.

-Da Zao - Tonifies the Spleen, tonifies Qi, nourishes the Blood, calms the Spirit and

moderates and harmonizes the harsh properties of the other herbs. With Sheng Jiang, nourishes the Blood and prevents injury from harsh Blood movers and assists the movement of Qi.

-Sheng Jiang - Releases the exterior, expels Cold, Warms the Lungs, transforms Phlegm and disperses and unblocks the Qi of the nasal orifices.

-She Xiang - Opens orifices, revives the Spirit, invigorates the Blood, reduces swelling and stops pain.

TREATS

Chronic epidural hemorrhage. Subarachnoid hemorrhage. Sharp, pounding headaches. Exhaustion of Blood in women. Childhood nutritional impairment. Emaciation in women due to Blood Deficiency. Vascular headache. Rheumatoid arthritis. Alopecia. Sinusitis. Retinal hemorrhage. Syncope due to Blood disorders. Rosacea. Trigeminal neuralgia. Lupus erythematosus. Tinnitus. Dizziness. Weakness. Headache. Intracranial postoperative hydrocephalus. Ear pain. Otitis Media. Cerebral injury. Intradural injury. Cerebral concussion. Post-concussion syndrome. Phthisis. Cerebrovascular accident. Hypersomnia. Carbon monoxide poisoning. Deafness. Cerebral arteriosclerosis. Embolism of the central retinal artery. Pulmonary tuberculosis. Vitiligo. Parkinson's disease. Abdominal fullness and distention. Migraine. Vertigo. Hoarseness. Stiff neck. Facial pain.

* WU PI SAN - 五皮散 - Five-peel Powder - Hoelen And Areca Combination

ACTIONS - Resolve Dampness. Reduces edema. Regulates Qi. Strengthens the Spleen. Reduces swelling.

SYNDROMES - Spleen Deficiency with vigorous Dampness and Qi Stagnation (Pi Shui - Skin Water.)

CLINICAL MANIFESTATIONS - Generalized edema. Sensation of heaviness, distention and fullness in the epigastrium and abdomen.. Labored, heavy breathing. Shortness of breath. Urinary difficulty. Oliguria. Asthma. Chest distention. Edema during pregnancy.. General edema in summer. Heavy extremities. Dyspnea. Gasping. Rapid breathing.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Avoid difficult to digest foods while taking this formula. With severe Spleen Deficiency, use Spleen tonifying herbs.

HERBS AND ACTIONS

-Sang Bai Pi - Descends Lung Qi, promotes urination and reduces edema. With Sheng Jiang, disperses and descends, restoring the water function of the Lung and facilitating

smooth flow into the Bladder. With Da Fu Pi and Fu Ling, for superficial edema with difficult urination.

-Sheng Jiang - Disperses edema and transforms Dampness.

-Fu Ling - Leaches out Dampness, strengthens transporting function of the Spleen and promotes urination.

-Chen Pi - Regulates Qi, adjusts the Middle and relieves the diaphragm, dries Dampness and transforms Phlegm. With Da Fu Pi, eliminates Qi Stagnation to allow free flow of Qi and fluids.

-Da Fu Pi - Promotes movement of Qi, descends Qi, expels Dampness, promotes urination and reduces edema. With Sheng Jiang Pi and Fu Ling Pi, for mild edema or superficial facial edema.

TREATS

Edema during pregnancy. Protein deficiency (malnutritional) edema. Ascites from cirrhosis of the Liver. Congestive Heart failure. Urticaria. Chronic nephritis. Hypertension. Asthma. Chronic glomerulonephritis. Dyspnea. Menopausal edema. Cardiac edema. Nephritic edema. Dropsy. Nephritis. Traumatic injuries. Nephrotic syndrome. Nausea/Vomiting. Gasping.

* WU WEI ZI TANG - 五味子汤 - Schisandra Decoction

ACTIONS - Reinforces and Strengthens Heart Qi.

SYNDROMES - Heart Qi Deficiency.

CLINICAL MANIFESTATIONS - Palpitations, initiated by exercise. Symptoms worse after exertion or when tired. Symptoms relieved by rest. Restless sleep. Insomnia. May be arrhythmia. Dizziness. Shortness of breath. Diminished vocal power. No desire to speak. Physical and mental fatigue. Excessive perspiration (in daytime). Facial pallor. Weakness. Suffocating sensation in the chest. Cold extremities.

HERBS AND ACTIONS

-Wu Wei Zi - Tonifies Qi, astringes sweat, generates fluids, quiets the Spirit and calms and contains Heart Qi. With Ren Shen and Mai Dong, for exhaustion of Qi and Yin with shortness of breath, coughing, and thirst and spontaneous night sweats with Qi Deficiency. With Huang Qi, for Yang Deficiency with spontaneous sweating.

-Mai Dong - Clears the Heart and eliminates irritability.

-Huang Qi - Tonifies Qi and Blood. With Mai Men Dong and Wu Wei Zi, for night sweats.

-Ren Shen - Tonifies Heart Qi and calms the Spirit. With Huang Qi, for Qi Deficiency with general debility, anorexia and spontaneous sweat.

-Suan Zao Ren - Nourishes Heart Yin, tonifies Liver Blood, calms the Spirit, astringes sweat and generates fluids..

-Bai Zi Ren - Nourishes the Heart, calms the Spirit and astringes Yin Deficiency sweat. With Suan Zao Ren, strongly quiets the Spirit, calms the emotions, enriches Yin and Blood, stops night sweats and treats palpitations, irritability and insomnia due to Yin and Blood Deficiency failing to nourish the Heart and Liver.

-He Huan Pi - Calms the Spirit and relieves constraint.

-Gan Cao -Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Heart palpitations. Anxiety. Premature ectopic beats. Spontaneous perspiration. Anemia. Sinus tachycardia. Sick sinus syndrome. Dyspnea.

* XIAO YAN TONG MAI HE JI

ACTIONS - Clears Heat. Cools the Blood. Invigorates the Blood. Dispels Stasis. Dispels Wind-Dampness. Unblocks the channels. Alleviates pain.

SYNDROMES - Heart Blood Stagnation with Heat.

CLINICAL MANIFESTATIONS - Pain, swelling and obvious tenderness in the superficial veins along the limbs or the thoracoepigastric walls. Hard cord-like swollen masses may be felt. Palpitations. Stabbing pain in the anterior region over the Heart. Suffocating sensation in chest. Maybe drawing pain down internal aspect of arm (especially left arm). Pain (in chest and/or arm) tends to be severe and intermittent. Thirst with a desire for cold drinks. Irritability, irascibility. Feeling of Heat and disturbance in the Heart. Insomnia. Flushed face. Bitter taste in mouth.

HERBS AND ACTIONS

-Xuan Shen - Clears Heat and cools the Blood.

-Dang Gui - Tonifies the Blood, invigorates, harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Tao Ren and Hong Hua, for amenorrhea, pain, swelling and other symptoms associated with Blood Stasis.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain. With Tao Ren, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Niu Xi - Invigorates the Blood, expels Blood Stasis. nourishes Liver and Kidney Yin, clears Damp-Heat in the Lower Jiao.

-Fang Ji - Promotes urination, reduces edema especially in the lower body, expels Wind-Dampness and alleviates pain.

-Wei Ling Xian - Dispels Wind-Dampness, unblocks the channels and alleviates pain. With Niu Xi, for Wind-Damp Bi causing joint pain (especially in the lower joints).

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Acute thrombotic phlebitis.

1.3.3.22 RT-TCM-22

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_22

Du Huo Ji Sheng Tang, Fu Gui Li Zhong Tang, Lumbago #1, Mai Wei Di Huang Wan, Qi Li San, Qiang Huo Bai Du San, San Bi Wan Jia Jian, Shu Jing Huo Xue Tang, Yao Tong Ling

Recordings Updated in May 2025

* DU HUO JI SHENG TANG - 獨活寄生湯 - Angelica, Pubescentis And Taxillus Decoction. Angelica Pubescens and Sangjisheng Decoction. Angelica Pubescens and Loranthus Decoction. Tuhuo and Loranthus Combination. Tuhuo and Vaeicum Combination

ACTIONS - Disperses Wind-Dampness. Scatters Cold. Stops Bi pain. Tonifies the

Kidneys and Liver. Tonifies Qi. Nourishes the Blood.

SYNDROMES - Bi Syndrome with Kidney and Liver Deficiency. Bi Syndrome with Qi and Blood Deficiency. Invasion of the muscles and bones by Wind-Cold-Damp. Atrophy disorder (wasting of the lower extremities)

CLINICAL MANIFESTATIONS - Painful joints. Heavy and painful sensations at fixed locations in lower back and extremities with weakness and stiffness or hypertonicity and immobility. Aversion to Cold. Attraction to warmth. Palpitations. Pain in the midline and back during pregnancy. Pain worse at night. General coldness. Sallow complexion. Wandering pain. Pale complexion. Shortness of breath. May be paresthesia and numbness. Cold pain in the low back and knees. Limited movement. Soreness, weakness and numbness of the joints. Tinnitus. Muscle spasms. Dizziness.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for Bi syndrome marked by strong Excess or Damp-Heat. Contraindicated for Bi syndrome marked by Liver and Kidney Yin Deficiencies. Use with caution during pregnancy.

HERBS AND ACTIONS

-Du Huo - Disperses Wind-Cold-Dampness from the Lower Jiao, bones and sinews, vitalizes the vessels and alleviates pain. With Xi Xin, for Shao Yin headache, with splitting pain that involves the teeth and cheeks due to External Wind-Cold and joint pain due to Wind-Cold-Dampness. With Xi Xin and Qin Jiao, for Wind-Damp Bi causing numbness, pain and soreness in the neck, back and lower extremities. With Fang Feng, for numbness in the legs.

-Xi Xin - Releases exterior Wind-Cold, disperses Internal Cold, warms the Lungs transforms Phlegm and scours Wind-Dampness from sinews and bones to stop pain. With Chuan Xiong, for Wind-Cold headache, toothache and Bi pain. With Chuan Xiong and Fang Feng, for Bi syndrome. With Du Zhong and Sang Ji Sheng, for chronic low back and knee pain.

-Fang Feng - Expels Wind-Cold and Dampness and alleviates pain. With Qin Jiao, for Wind-Damp Bi with spasms of the tendons or numbness of the limbs and pain due to Wind-Dampness in patients with Blood Deficiency.

-Qin Jiao - Expels Wind-Dampness and relaxes sinews.

-Sang Ji Sheng - Expels Wind-Dampness, strengthens sinews and bones, tonifies Liver and Kidney Yin and nourishes the Blood. With Du Zhong, and Niu Xi, expels Wind-Dampness and tonifies the Liver and Kidneys.

-Du Zhong - Tonifies the Kidneys and Liver and strengthens sinews and bones. With Sang Ji Sheng, Dang Gui and Chuan Xiong, for low back pain during and after menstruation.

-Niu Xi - Invigorates the Blood, strengthens the sinews and bones, benefits the joints and nourishes the Liver and Kidney Yin. With Sang Ji Sheng and Du Zhong, directs the other herbs toward lower extremities. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency.

-Rou Gui - Warms Kidneys, strengthens Yang, strengthens Ming Men Fire, disperses deep Cold, warms and unblocks the channels and vessels to open the lower back and alleviates pain. With Ren Shen and Shu Di Huang, for palpitations and shortness of breath due to Deficiencies of Heart and Kidneys. With Dang Gui and Chuan Xiong, for dysmenorrhea, postpartum abdominal pain or amenorrhea due to Deficiency Cold of the Chong and Ren channels.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood, disperses Blood Stasis and treats abdominal pain. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Bai Shao and Fu Ling, for diarrhea during pregnancy with mild abdominal pain.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis. With Rou Gui, for irregular menstruation with Cold in the Blood.

-Shu Di Huang - With Dang Gui, for Blood Deficiency Heat. With Ren Shen, for Qi, Blood and Yin Deficiencies. With Dang Gui, Bai Shao and Chuan Xiong, for anemia.

-Bai Shao - Nourishes Blood and alleviates pain. With Fu Ling, strengthens the Spleen. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Du Huo, Qin Jiao, Ren Shen, Dang Gui and Gan Cao, for chronic Bi Syndrome with injury to Qi and Blood leading to spasms of the extremities.

-Ren Shen - Tonifies Qi, calms the Spirit and generates Body Fluids.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and harmonizes the Middle Jiao.

-Gan Cao - Tonifies Middle Qi and moderates and harmonizes the harsh properties of the other herbs. With Ren Shen and Fu Ling, strengthens the Spleen and augments Qi.

TREATS

Chronic lower back pain. Sciatica due to degenerative joint disease. Sequelae of poliomyelitis. Rheumatic sciatica. Chronic arthralgia. Chronic arthritis. Paralysis. Neck pain and stiffness. Osteoarthritis. Rheumatoid arthritis. Coxarthrosis. Bone spurs.

Atrophy of the lower limbs. Hip internal rotation injury. Numbness. Gout. Palpitations. Scapulohumeral periarthritis. Toe Pain. Hip pain. Stroke. Hemiplegia. Prolapse of lumbar intervertebral disc. Psoriasis. Dermatosclerosis. Dendrolimiasis. Hyperosteogeny. Ankylosing spondylitis. Postpartum ache and pains. Bone Bi. Vertebral arthrosis. Gonarthrosis. Postpartum body pain. Paresthesia. Knee pain. Weakness. Scleroderma. Pain in the midline and back during pregnancy.

* FU GUI LI ZHONG WAN - 附桂理中丸 - Prepared Aconite And Cinnamon Pill To Regulate The Middle. Gui Fu Li Zhong Tang. Cinnamon and Prepared Aconite Decoction to Regulate the Middle. Decoction to Regulate the Spleen and Stomach with Aconite and Cinnamon Bark

ACTIONS - Warms and Tonifies the Spleen, Stomach and Kidneys. Dispels Cold. Replenishes Yang.

SYNDROMES - Spleen, Stomach and Kidney Yang Deficiency, with Accumulation of Cold.

CLINICAL MANIFESTATIONS - Diarrhea with undigested food. Aversion to Cold or. Daybreak (Cock Crow) diarrhea. Cold and stiff extremities. Back pain. Reduced appetite. Fullness in the epigastrium and abdomen (likes pressure). Lack of thirst. Vomiting. Loose stools. Trismus.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with External Invasion with fever. Contraindicated for those with sudden turmoil disorder - stop when diarrhea and Yin Deficiency vomiting have stopped.

HERBS AND ACTIONS

-Gan Jiang - Warms the Spleen and Stomach and eliminates interior Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Bai Zhu and Ren Shen, for Spleen Yang Deficiency with a cold abdomen, vomiting and diarrhea. With Fu Zi, for debilitated Spleen and Kidney Yang with incessant diarrhea.

-Ren Shen - Strongly tonifies Source Qi, tonifies Spleen and Stomach Qi, reinforces Yang and rectifies the ascending and descending functions of the the Middle Jiao. With Fu Zi, for Collapsed Qi and Devastated Yang with spontaneous sweat, ice cold extremities and shortness of breath. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Bai Zhu - Aids Ren Shen in tonifying the Spleen and Stomach, strengthens the Spleen and Dries Dampness. With Gan Jiang, Ren Shen and Gan Cao, for Spleen and Stomach Deficiency Cold.

-Rou Gui - Warms the Spleen, tonifies Kidney Yang and relieves pain by dispelling Cold.

With Fu Zi, powerfully tonifies Kidney Yang, for Kidney Yang Deficiency with lower back pain and weakness in the legs and knees. With Fu Zi and Gan Jiang, for Cold, painful abdomen, anorexia, and diarrhea due to Kidney and Spleen Yang Deficiency.

-Fu Zi - Restores Kidney and Heart Yang, relieves pain and Coldness and dispels water and Dampness. With Bai Zhu, for Spleen Yang Deficiency with a Cold, painful abdomen, vomiting and watery diarrhea. With Bai Zhu and Gan Jian, for Internal ascendancy of Yin Cold leading to lack of arousal of Spleen Yang with abdominal pain and Cold with watery diarrhea.

-Gan Cao - Augments Qi of the Middle Jiao and moderates and harmonizes the harsh properties of other herbs. With Ren Shen, relieves palpitations and anxiety.

TREATS

Acute or chronic gastritis. Acute or chronic gastroenteritis. Gastrectasis. Gastric or duodenal ulcers. Colitis. Polyuria. Nausea/Vomiting. Anorexia. Ulcerative colitis. Gastroptosis. Irritable bowel syndrome. Chronic colitis. Cholera. Enteritis. Senile dementia. Abdominal fullness and distention. Celiac disease.

* LUMBAGO #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Expels Cold and Dampness. Warms and opens the channels. Supports the Kidneys.

SYNDROMES - Cold-Damp in the Lower Jiao.

CLINICAL MANIFESTATIONS - Cold pain in the lower back and body. The lower back region feels Cold to the touch. The pain is a deep, unremitting ache. The pain may be occasionally be severe. Twisting and bending are difficult. The pain is aggravated by cold weather. Lying down provides no improvement. Sciatica. Copious urination. Extreme heavy sensation in the lower back. Absence of thirst.

HERBS AND ACTIONS

-Sang Ji Sheng - Expels Wind-Dampness, strengthens sinews and bones, tonifies Liver and Kidney Yin and nourishes the Blood. With Du Zhong, and Niu Xi, expels Wind-Dampness and tonifies the Liver and Kidneys. With Du Huo and Niu Xi, for Kidney and Liver Yin Deficiency and Wind-Dampness causing low back and leg pain, stiffness and soreness. With Xu Duan, Dang Gui and Du Zhong, for restless fetus, and back pain due to Yin and Blood Deficiencies.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Xu Duan - Tonifies the Liver and Kidneys, strengthens the sinews and bones, promotes the movement of Blood and alleviates pain. With Du Zhong, tonifies Liver and Kidneys, strengthens the lower back and secures the Chong and Ren channels to treat aching in the lower back and knees, weakness of the legs which makes walking difficult and especially threatened miscarriage due to instability of the Chong and Ren channels and restless fetus or bleeding during pregnancy accompanied by lower back pain and a sense of dropping in the lower trunk. With Du Zhong and Niu Xi, for deficient Kidneys or Cold-Damp Bi causing low back and leg pain and weakness and contracture of the leg muscles.

-Du Huo - Disperses Wind-Cold-Dampness from the Lower Jiao, bones and sinews, vitalizes the vessels and alleviates pain. With Du Zhong, Sang Ji Sheng and Dang Gui, for Wind-Dampness in a patient with underlying Kidney Deficiency, with low back and knee pain and stiffness. With Xi Xin, for joint pain due to Wind-Cold-Dampness.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Gan Jiang, eliminates Cold Dampness in the Spleen with loss of taste, a sticky sensation in the mouth, nausea, vomiting, diarrhea and a thick, white tongue coat.

-Niu Xi - Invigorates the Blood, strengthens the sinews and bones, benefits the joints and nourishes the Liver and Kidney Yin. With Sang Ji Sheng and Du Zhong, directs the other herbs toward lower extremities. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold and alleviates pain. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses and amenorrhea, and Wind-Damp Invasion blocking the Blood vessels causing pain, numbness and paralysis. With Rou Gui, for irregular menstruation with Cold in the Blood.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood, disperses Blood Stasis and treats abdominal pain.

-Du Zhong - Tonifies the Kidneys and Liver and strengthens sinews and bones. With Sang Ji Sheng, Dang Gui and Chuan Xiong, for low back pain during and after menstruation.

-Gan Jiang - Warms the Middle, expels Cold, rescues Devastated Yang and expels Interior Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Fu Ling and Bai Zhu, for Cold-Dampness in the Lower Jiao leading to a sense of heaviness and Cold in the lower back.

-Rou Gui - Warms Kidneys, strengthens Yang, strengthens Ming Men Fire, disperses

deep Cold, warms and unblocks the channels and vessels to open the lower back and alleviates pain. With Dang Gui and Chuan Xiong, for dysmenorrhea, postpartum abdominal pain or amenorrhea due to Deficiency Cold of the Chong and Ren channels.

-Xi Xin - Releases exterior Wind-Cold, disperses Internal Cold, warms the Lungs transforms Phlegm and scours Wind-Dampness from sinews and bones to stop pain. With Chuan Xiong, for Wind-Cold headache, toothache and Bi pain. With Du Zhong and Sang Ji Sheng, for chronic low back and knee pain. With Du Huo, for joint pain due to Wind-Cold-Dampness.

TREATS

Low back pain. Sciatica. Lumbago.

* MAI WEI DI HUANG WAN - 麦味地黄丸 - Ophiopogonis, Schisandra And Rehmannia Decoction

ACTIONS - Enriches Yin. Astringes and Nourishes the Essence of the Liver and Kidneys.

SYNDROMES - Kidney Yin Deficiency. Heart and Kidney Yin Deficiency. Liver and Kidney Yin Deficiency. Kidney and Lung Yin Deficiency.

CLINICAL MANIFESTATIONS - Low back, knees and legs painful and weak. Foot pain. Light-headedness. Vertigo. Tinnitus. Diminished hearing. Five sole Heat. Chronic dry, sore throat. Toothache. Wasting and thirsting disorder (Xiao Ke). Dizziness. Muscular weakness. Dry skin. Deafness. Steaming bones. Tidal fevers. Loose teeth. Cough. Shortness of breath. Dripping urine. Thirst. Dry tongue. Numbness and weakness at the waist and knees. Heel pain. Dry mouth. Blurred vision. Hemoptysis. Asthma. Hot flashes. Nocturnal emissions. Urinary incontinence. Spontaneous and nocturnal emissions. Night sweats.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution for those with Spleen Deficiency type diarrhea and indigestion. Contraindicated for those with Yang Deficiency with a white greasy tongue coat.

HERBS AND ACTIONS

-Mai Dong - Moistens the Lungs, stops cough, nourishes Stomach Yin, generates fluids, clears the Heart, eliminates irritability and moistens the Intestines.

-Wu Wei Zi - Astringes leakage of Lung Qi, tonifies Qi, astringes Jing, nourishes Kidney Yin, stops diarrhea, astringes sweat, generates fluids, tonifies the Heart and calms the Spirit. With Shu Di Huang, Shan Zhu Yu and Shan Yao, for Lung and Kidney Deficiencies with cough and wheezing.

-Shu Di Huang - Tonifies the Kidneys and Nourishes Yin and Blood. With Shan Yao and Ze Xie, for ascendant Fire due to exhaustion of Kidney Yin. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu, Mu Dan Pi, Fu Ling and Ze Xie, for Liver and Kidney Yin Deficiencies. With Shan Zhu Yu, Shan Yao and Ze Xie, for Xiao Ke with predominant polyuria.

-Shan Zhu Yu - Nourishes Kidney Yin and Yang, astringes Yin and stops perspiration. With Shan Yao, tonifies Liver and Spleen. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiencies of the Liver and Kidneys.

-Shan Yao - Strengthens the Spleen, stabilizes the Kidneys and nourishes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea, dizziness, tinnitus, lower back pain, impotence and night sweats. With Wu Wei Zi and Mai Dong, for Lung Deficiency with cough.

-Fu Ling - Strengthens the Spleen and drains Dampness.

-Mu Dan Pi - Clears Heat and Deficiency Fire.

-Ze Xie - Promotes urination and prevents Kidney Fire as a result of tonification. With Fu Ling and Mu Dan Pi, regulates the Kidneys, Liver and Spleen, drains and tonifies. With Fu Ling, promotes urination. With Mu Dan Pi, for steaming bone disorder, dizziness, and vertigo.

TREATS

Neurasthenia. Pulmonary tuberculosis. Diabetes mellitus. Chronic nephritis. Hyperthyroidism. Chronic glomerulonephritis. Chronic urinary tract infection. Hypertension. Failure to thrive. Functional uterine bleeding. Optic neuritis. Optic nerve atrophy. Central retinitis. Nephroatrophy. Senility. Impotence. Spermatorrhea. Esophageal cancer. Chronic asthma. Bronchitis. Side effects of steroids. Nephrotic syndrome. Chronic tonsillitis. Kidney failure. Hyperglycemia. Deafness. Knee pain. Loss of voice. Hot flashes. Dyspnea. Urinary incontinence. Foot pain. Allergic disorders. Bronchiaesthenia. Chronic urticaria. Chronic hepatitis. Nocturnal emissions. Irregular menstruation. Addison's disease. Heart failure. Sore throat. Dry mouth. Retarded growth in children. Toothache. Vegetative nerve functional disturbance. Arteriosclerosis. Amenorrhea. Scanty menstruation. Infantile dysplasia. Infantile malnutrition. Menopause. Hemoptysis. Chronic laryngitis. Cough. Chronic obstructive pulmonary disease (COPD). Tinnitus. Low back pain. Weakness. Hoarseness. Night sweats. Bronchiectasis. Heel pain.

* QI LI SAN - 七厘散 - Seven-thousandths Of A Tael Powder. Anti-Bruise Powder. Musk and Catechu Formula

ACTIONS - Invigorates the Blood. Dispels Blood Stasis. Promotes the movement of Qi. Reduces swelling. Alleviates pain and bleeding.

SYNDROMES - Qi and Blood Stagnation due to traumatic injury.

CLINICAL MANIFESTATIONS - Bruising, swelling and pain accompanying traumatic injuries. Fractures. Torn sinews. Bleeding due to laceration.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy.

NOTES - This is a frequently used formula.

HERBS AND ACTIONS

-Xue Jie - Activates the Blood, dispels Blood Stasis, alleviates pain and stops bleeding. With Ru Xiang and Mo Yao, for trauma-induced pain, swelling or hemorrhage, especially in the chest and abdomen. With Er Cha and Ru Xiang, for bruising, swelling and pain from trauma. With Er Cha, Mo Yao and Ru Xiang, for bleeding due to External injury.

-Hong Hua - Activates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain.

-Ru Xiang - Activates the Blood, promotes the movement of Qi, relaxes the sinews, invigorates the channels, reduces swelling, generates flesh and alleviates pain. With Mo Yao, for traumatic injury pain and Blood Stasis obstructing the channels with epigastric, flank abdominal and joint pain. With She Xiang and Bing Pian, for pain from trauma.

-Mo Yao - Activates the Blood, dispels Blood Stasis, alleviates pain, reduces swelling, generates flesh and promotes healing.

-She Xiang - Activates the Blood, dissipates masses, reduces swellings, detoxifies, opens the channels and alleviates pain. With Hong Hua, for chest and abdominal pain, amenorrhea and dysmenorrhea due to Blood Stasis.

-Bing Pian - Aromatically opens orifices, revives the Spirit, unblocks closed disorders, clears Heat, drains Fire and alleviates pain.

-Er Cha - Drains Dampness, absorbs suppuration, stops bleeding and generates flesh.

-Zhu Sha - Sedates the Heart and calms the Spirit.

TREATS

Bruising, swelling and pain accompanying traumatic injuries. Fractures. Hematemesis.

Strains. Infantile diarrhea. Wounds. Coronary Heart disease. Hepatitis. Painful obstruction. Gout (topical). Torn sinews. Bleeding due to lacerations. Burns. Non-specific toxic swellings. Herpes zoster. Echymosis. Myocarditis. Rib pain. Stab wounds. Toe Pain (topical).

* QIANG HUO BAI DU SAN - 羌活敗毒散 - Notopterygium Powder To Overcome Toxins

ACTIONS - Dispels Wind. Warms Cold. Eliminates Dampness.

SYNDROMES - Cold Dampness in the Lower Jiao. Tai Yang Cold-Damp.

CLINICAL MANIFESTATIONS - Chronic cold pain in the lower back and body with a heavy sensation. A preference for warmth. Pain worse in Damp weather. Pain radiating downward and to the lower limbs. Limited movement of the lower spine. Severe hardness and stiffness in the lumbar area with obvious tenderness. A cord-like, swollen sensation of the supraspinous ligament on palpation. A movable cord-like sensation at the origin of the sacro-spinal muscle. Pain and other symptoms worsen gradually. A long-lasting course of illness. A heavy sensation in the head. The lower back region feels Cold to the touch. The pain is a deep, unremitting ache. The pain may be occasionally be severe. Twisting and bending are difficult. The pain is aggravated by cold weather. Lying down provides no improvement. Stiffness which is worse on rainy days. Aversion to Cold. Cold extremities. Sciatica. Copious urination. Extreme heavy sensation in the lower back. Absence of thirst. Maybe headaches. Nausea. Loose stools. A poor appetite. Maybe general body aches. Spontaneous contracture of the limbs. Maybe a feverish sensation in the upper body. Craves hot drinks and compresses. Dizziness. Vomiting. Profuse, purulent leukorrhea with a foul odor.

HERBS AND ACTIONS

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction and alleviates pain. With Fang Feng, for pain due to External Wind-Dampness. With Chuan Xiong, for headaches and generalized body aches and pains associated with the common cold or painful obstruction. With Du Huo, for Wind-Dampness. With Fang Feng, Bai Zhi and Cang Zhu, for Wind-Cold. With Cang Zhu, for a heavy-headed sensation.

-Chuan Xiong - Expels Wind, alleviates pain, invigorates the Blood and promotes the movement of Qi.

-Cang Zhu - Induces sweating, expels Wind-Dampness and clears Dampness from the Lower Jiao.

-Du Huo - Disperses Wind-Cold-Dampness, releases the Exterior and alleviates pain, especially in the low back and legs. With Fang Feng, for numbness in the legs. With Qiang Huo, for joint pain and numbness.

-Chai Hu - Resolves Shao Yang disorders, reduces fever, spreads Liver Qi and relieves Stagnation.

-Bai Zhi - Expels Wind, eliminates Dampness, dispels Cold and alleviates pain. With Chuan Xiong, for a headache. With Qiang Huo, for Wind-Cold-Dampness causing fever, chills and headaches. With Fang Feng and Qiang Huo, for Wind-Cold with a headache and a stuffy nose.

-Fang Feng - Expels Wind-Dampness and alleviates pain. With Jing Jie, for exterior patterns in any season. With Cang Zhu, for pain due to Wind-Damp Bi with aching joints, heavy limbs and generalized aching and discomfort. With Jing Jie and Qiang Huo, for Wind-Cold.

-Qian Hu - Expels Wind-Heat, expels Phlegm and descends Qi.

-Jing Jie - Releases the Exterior, expels Wind and relieves muscle spasms.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Low back pain.

* SAN BI WAN JIA JIAN - 三痺囊加減 - Modified Three Kinds Of Rheumatism Pill

ACTIONS - Dispels Wind-Cold-Damp. Tonifies Qi. Strengthens tendons. Nourishes and Activates the Blood. Breaks up Blood Stasis. Stops pain.

SYNDROMES - Wind-Cold-Damp Bi with Blood Stasis. San Bi.

CLINICAL MANIFESTATIONS - Aversion to Wind, Cold and Dampness. Stiff and painful muscles and joints. Limited movement. Pain aggravated by Wind. Sensitive to climatic changes. Pain aggravated by Cold. Numbness of muscles. Pain aggravated by Dampness. Cold joints. Pain worse at night. Low back pain or soreness. Lumbago. Fatigue. Heaviness of the body. Heaviness of the muscles. Preference for warmth. Weak joints. Palpitations. Pale face. Joint deformity. Shortness of breath. Preference for dry weather.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat.

NOTES - This formula has its most predominant action on Dampness.

HERBS AND ACTIONS

-Du Huo - Releases the Exterior, dispels Wind-Cold-Dampness, opens the channels, vitalizes vessels and stops pain. With Qin Jiao, expels Wind-Cold-Damp, relieves arthralgia and stops pain.

-Qin Jiao - Clears Heat, expels Wind-Dampness, relaxes sinews, clears Deficiency Heat and resolves Dampness - good for cramps in the limbs.

-Wei Ling Xian - Dispels Wind-Dampness, opens the channels, alleviates pain, reduces Phlegm and dispels Dampness - good for swelling, arthralgia with numbness and spasms.

-Fang Ji - Expels Wind-Dampness, alleviates pain and promotes urination.

-Mu Gua - Relaxes sinews (increases Qi and Blood circulation), opens the channels and transforms Dampness - good for lower back and extremities.

-Luo Shi Teng - Dispels Wind-Dampness and opens channels.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones and circulates Qi and Blood.

-Huang Qi - Strengthens the Spleen, tonifies Qi, consolidates Wei Qi, stabilizes the Exterior and nourishes Blood. With Gan Cao, strengthens Qi and consolidates Wei. With Gui Zhi, for Qi and Blood Deficiencies and Ying and Wei Deficiencies with numbness and painful obstruction of the musculature.

-Niu Xi - Expels Wind, drains Dampness, opens the channels, invigorates the Blood and eliminates Blood Stasis.- especially good for knee pain and flaccid extremities.

-Ji Xue Teng - Nourishes and invigorates the Blood, opens the channels and relaxes sinews - good for numbness, low back pain and knee pain.

-Sang Ji Sheng - Strengthens the sinews and bones, tonifies Liver and Kidney Yin, expels Wind-Dampness and nourishes the Blood - good for low back and knees. With Du Huo and Niu Xi, for Kidney and Liver Yin Deficiency and Wind-Dampness causing low back and leg pain, stiffness and soreness.

-Dang Gui - Nourishes, invigorates and harmonizes the Blood, disperses Cold and stops pain. With Gan Cao, moderates spasms. With Huang Qi, for Blood Deficiency.

-Fang Feng - Releases the Exterior, expels Wind-Cold-Dampness, stops pain, expels Internal Wind, stops spasms, moves Qi, tonifies the Spleen and treats gout. With Qin Jiao, for Wind Dampness Bi with spasms of the tendons or numbness of the limbs and pain due to Wind-Dampness in patients with Blood Deficiency.

-Gui Zhi - Releases external Wind-Cold from the muscle layer, harmonizes the Ying and Wei, warms the channels and collaterals, relieves pain, disperse, Cold, unblocks Yang, transforms the Qi, warms and facilitates the flow of Yang Qi in the chest and warms and facilitates the flow of Blood through the vessels.
With Fang Ji, for Wind-Cold Damp Bi.

-Gan Cao - Tonifies Qi, harmonizes and protects Stomach.

TREATS

Osteoarthritis of the lumbar spine. Rheumatic diseases. Osteophytosis of the lumbar spine. Acute and chronic rheumatic pain. Rheumatic lumbago. Rheumatoid arthritis. Lumbar muscle strain. Gouty arthritis. Arthralgia. Osteoarthritis. Sciatica. Periarthritis of the shoulder. Fibrositis. Tenosynovitis. Nonarticular rheumatism. Tendinitis. Bursitis.

* SHU JING HUO XUE TANG - 舒經活血湯 - Relax The Channels And Invigorate The Blood Decoction

ACTIONS - Unblocks and relaxes the channels. Invigorates the Blood. Breaks up Blood Stasis. Dispels Wind-Dampness. Strengthens the tendons.

SYNDROMES - Wind-Damp Bi with Blood Deficiency and Blood Stasis.

CLINICAL MANIFESTATIONS - Muscle aches. Joint pain. Radiating pain in the legs. Low back pain. Edema. Numbness in the lower extremities. Pain in the trunk and extremities. Abdominal pain. Sciatica. Aversion to Wind and Cold. Knee pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Avoid foods that are raw, Cold or Damp in nature while using this formulas.

NOTES - This formula is for conditions that are primarily Excess in nature.

HERBS AND ACTIONS

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews. With Dang Gui, nourishes Yin and Blood.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels

causing pain, numbness, and paralysis. With Di Huang, Bai Shao and Dang Gui, for headache due to Blood Deficiency.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, induces sweating and expels Wind-Dampness.

-Fu Ling - Promotes urination and leaches out Dampness.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints.

-Wei Ling Xian - Dispels Wind-Dampness, unblocks the channels and alleviates pain. With Qiang Huo, for Wind-Damp Bi causing joint pain, especially in the upper joints. With Niu Xi, for Wind-Damp Bi causing joint pain, especially in the lower joints.

-Fang Ji - Expels Wind-Dampness, alleviates pain, promotes urination and reduces edema.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Chuan Xiong, for headache and generalized body aches and pains associated with the common cold or painful obstruction. With Fang Feng, for pain due to External Wind-Dampness. With Cang Zhu, for a heavy-headed sensation.

-Fang Feng - Releases the exterior, expels External Wind, expels Wind-Dampness and alleviates pain. With Cang Zhu, for pain due to Wind-Dampness Bi with aching joints, heavy limbs and generalized aching discomfort. With Qiang Huo, for Wind-Dampness. With Qiang Huo and Dang Gui, for Wind-Cold-Damp Bi.

-Long Dan - Drains Damp-Heat from the Liver and Gallbladder channels.

-Bai Zhi - Expels Wind, eliminates Dampness, dispels Cold and alleviates pain. With Chuan Xiong, for headache. With Qiang Huo, for Wind-Cold Dampness causing fever, chills and headaches. With Fang Feng and Qiang Huo, for Wind-Cold with headache and stuffy nose.

-Chen Pi - Regulates Qi, adjusts the Middle, dries Dampness and transforms Phlegm. With Sheng Jiang, for Cold-Dampness Obstructing the Middle. With Cang Zhu and Fu Ling, for a thick white tongue coat with no desire to drink.

-Gan Cao - Moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Bai Shao, moderates spasms and alleviates pain,

for painful spasms of the leg.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold and reduces the toxicity of other herbs.

TREATS

Painful obstruction. Bi syndrome. Neuralgia. Lumbago. Sciatica. Postpartum pain due to thrombosis. Hypertension. Edema. Hip internal rotation injuries. Paresthesia. Peripheral neuropathy. Arthritis. Arthralgia. Gout. Purpura. Hemiplegia. Leg pain. Beriberi. Monoplegia. Numbness. Abdominal pain.

* YAO TONG LING - Relieve Lumbago Decoction/pill

ACTIONS - Dispels Wind-Cold-Damp. Invigorates the Blood. Smooths the channels. Harmonizes the collaterals. Benefits the muscles. Tonifies Kidney Jing. Stops pain.

SYNDROMES - Kidney Jing Deficiency Bi with Wind-Cold-Damp and Blood Stagnation.

CLINICAL MANIFESTATIONS - Low back pain. Sciatica. Leg pain. Preference for pressure and warmth. Pain worse at night. Limitation of joint movement. Local feeling of Cold. Stabbing pain. Muscle spasms. Referred pain toward the legs. Lower back weakness. Nocturia. Stiffness of the back. Numbness of the legs. Feebleness of the knees. Tinnitus.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Wind-Damp-Heat.

HERBS AND ACTIONS

-Du Huo - Disperses Wind-Cold-Dampness, releases the Exterior and alleviates pain. With Xi Xin, for joint pain due to Wind-Cold-Dampness. With Xi Xin and Qin Jiao, for Wind-Damp Bi causing numbness, pain and soreness in the neck, back and lower extremities. With Qiang Huo, for joint pain and numbness.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Chuan Xiong, for headache and generalized body aches and pains associated with the common cold or painful obstruction.

-Qin Jiao - Expels Wind-Dampness, opens the channels and soothes the sinews and collaterals.

-Hai Feng Teng - Dispels Wind-Dampness, unblocks the channels, disperses Cold and stops pain. With Gui Zhi, for pain, impaired joint movement and spasms of the sinews

due to Wind-Damp Bi. With Qin Jiao, Gui Zhi and Dang Gui, for Wind-Damp-Bi causing pain, spasms and numbness.

-Ji Xue Teng - Invigorates and tonifies the Blood, invigorates the channels and relaxes the sinews.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Gui Zhi and Qin Jiao, for Wind-Damp Bi. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. With Qiang Huo, Chuan Xiong and Qin Jiao, for postpartum Bi syndrome.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis. With Gui Zhi, expels Wind-Dampness, warms the channels and collaterals, facilitates joint movement and relieves Bi pain for joint and limb pain due to External Wind-Cold invasion.

-Xi Xin - Releases Exterior Wind and Cold, disperses Internal Cold and alleviates pain. With Chuan Xiong, for Wind-Cold headache, toothache and Bi pain.

-Gui Zhi - Releases the exterior, assists the Yang, warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and tonifies Kidney Yang. With Gui Zhi, Qin Jiao and Du Huo, for Damp-Cold back pain with sore, swollen feeling and localized coldness that is exacerbated by exposure to Cold and accompanied by a deep, slow pulse and a white, greasy tongue coat.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

TREATS

Chronic lumbar muscle strain. Osteoarthritis of the lumbar spine. Sequelae of vertebral fracture. Acute lumbar muscle strain. Protrusion of lumbar intervertebral disc. Sacroiliac sprain. Rheumatic lumbago. Lower back weakness. Sciatica. Osteophytosis of the spine. Traumatic lumbago. Herniated nucleus pulposus. Sciatic nerve lesion. Sacro-coccygeal injury. Bi syndrome.

1.3.3.23 RT-TCM-23

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_23

Herpes Simplex Virus Type 1-TCM-Herbs-Molecules, Herpes Zoster-TCM-Herbs-Molecules, Herpes Zoster TCM Herbs After formation of scars, Herpes Zoster TCM Herbs Before resolution of lesions, Metabolic Bone Disease TCM-Herbs-Molecules, Rheumatoid Arthritis TCM-Herbs-Molecules 1, Rheumatoid Arthritis TCM-Herbs-Molecules 2, T2DM Diabetes TCM Herbs-Molecules, T2DM Diabetes TCM-Molecules

Recordings Updated in May 2025

* HERPES SIMPLEX VIRUS TYPE 1 TCM-HERBS-MOLECULES

Each group plays for five minutes,

1, Notoginsenoside ST-4, Isoquercitrin, Ursolic acid. Gallium-Curcumin, Copper-Curcumin, Lupeol,
FK-3000, Curcumin, Norcepharadione B, Quercetin

2. Da Qing Ye, Ban Lan Gen, Oblonganoside H, Houttuynoid A, Houttuynoid D, Houttuynoid B, Yu Xing Cao,
Alantolactone, Caffeic acid, Vanillic acid

3. (Yin Chen Hao Tang and molecules), Dong Gua Ren, Zhi Zi, Yin Chen, Da Huang, Tricin, Abyssinone II,
FIT-039, Ent-16-Kauren-19-ol, Apigenin, Linalool

4. Epigallocatechin 3-O-gallate, Epicatechin gallate, Roscovitine, Olomoucine, Kaempferol, Naringenin,
Galangin, 4'-Hydroxymethyltrioxsalen, Harmine, Eugenol

5. Huang Qi, Afzelin, Barbaloin, Leachianone G, Morin, Emodin, Resveratrol, Himachalol, Isoscopoletin,
Beta-Himachalene

6. Neohesperidin, Naringin, Proanthocyanidin A2, Quercitrin, Epicatechin, Sinapic acid, Syringic acid,
Ferulic acid, Gallic acid, P-Anisic acid

* HERPES ZOSTER TCM HERBS AND MOLECULES

Each group plays for five minutes,

1. Glycyrrhizin, Homoharringtonine, Harringtonine, Geniposide, Tetrahydropalmatine, Valacyclovir, Famciclovir, Wogonin, Resveratrol, Genipin

2. Banlangen, Lian qiao, Yanhusuo, Zhi zi, Gan cao, Di huang, Isoquercitrin, FV-100, Quercetin

3. LX9211, Swertiamarin, Sweroside, Gentiopicroside, Valomaciclovir, Ligustilide, N-butylidenephthalide, Limonene-1-2-diol,
Perillic acid, D-limonene

4. PGG, Dang gui, Mu tong, Che qian zi, Huang lian, Ze xie, Long dan, Sorivudine, Xiong huang

5. Brincidofovir, Amenamevir, Baicalin, 6 Alpha hydroxy-geniposide, Shanzhiside, Dehydrocorydaline,
Ixoroside, Baicalein, Gentiolactone, Crisugabalin

6. Chai hu, Alisol B monoacetate, Vitamin B12, Alisol F, Glycyrrhetinic acid, Dehydrocorybulbine, Berberine,
Vitamin B1, Netivudine, Alismol

* HERPES ZOSTER TCM HERBS AFTER FORMATION OF SCARS

Chi shao, Yu jin, Ji xue teng, Mo yao, Ru xiang, Wei ling xian

* HERPES ZOSTER TCM HERBS BEFORE RESOLUTION OF LESIONS

Ye ju hua, Zi cao, Di yu, Di huang, Ku shen

* METABOLIC BONE DISEASE TCM HERBS AND MOLECULES

The aim is to promote bone formation, inhibit bone resorption and, promote bone mineralization. That is, restore bones microarchitecture, enhance bone mass, and promote bone physiological qualities. Each group plays for five minutes,

1. (Er Xian Tang and other herbs), Dan Shen, Du Zhong, Zhi Mu, Yin Yang Huo, Mo Han Lian, Ba Ji Tian,
Xian Mao, Dang Gui, Nu Zhen Zi, Huang Bai

2. Icariin, Naringin, Ursolic acid, Icaritin, Bavachin, Corylin, Quercetin, Luteolin, Genistein, Formononetin

3. Ginsenoside Rg1, Wuzhuyu, Kaempferitrin, Halofuginone, Curcumin, Monascin, Shikonin, Artemisin,
Resveratrol, Norcantharidin

4. Crocin, Salvianolic acid B, Celastrol, Puerarin, Gu Sui Bu + Calcium carbonate, Glabridin, Salidroside,
6-Gingerol, Eriodictyol, Anthocyanidin

5. Epigallocatechin gallate, Polydatin, Secoisolariciresinol, Sweroside, Calcium phosphate, Rutaecarpine,
Kaempferol, Naringenin, Isoliquiritigenin, Isofraxidin

6. Kobophenol A, Ophiopogonin D, Ligustroflavone, Specnuezhenide, Neoeriocitrin, Wedelolactone,
Acerogenin A, Honokiol, Vanillic acid, Apocynin

7. Asperosaponin VI, Poncirin, BNTA, Ugonin K, Gingenoside Rb2, Aucubin, Kirenol, Imperatorin, Bakuchiol,
Costunolide

8. Maohuoside A, Ikarisoside A, Ecdysterone, Curculigoside, Leniolisib, Diosgenin, Morroniside, Monotropein, Geniposide,
5-(Hydroxymethyl)-2-Furaldehyde

9. (Shujin Huoxue formula), Niu Xi, Tao Ren, Bai Shao, Sheng Jiang, Gan Cao, Bai Zhi, Chuan Xiong,
Di Huang, Qiang Huo, Dang Gui, Cang Zhu, Fu Ling, Wei Ling Xian, Fang Ji, Chen Pi, Fang Feng, Long Dan

* RHEUMATOID ARTHRITIS TCM HERBS AND MOLECULES 1

Each group plays for five minutes,

1. (Xinfeng and molecules), Yi Yi Ren, Lei Gong Teng, Huang Qi, Ceanothic acid, Mangiferin, Cirsimaritin, Austricine,
6-Diazo-5-oxo-L-norleucine, P-Coumaric acid, Cinnamic Acid

2. Hesperidin, Kaempferol-3-O-rutinoside, Naringin, Cycloastragenol, Paeoniflorin, 2,3,5,4′-Tetrahydroxyl-diphenylethylene-2-O-glucoside, Quercetin, Imperatorin, Atractylenolide III, Farnesene

3. (Bi-Qi and molecules), Niu Xi, Dan Shen, Ma Qian Zi, Gan Cao, Dang Shen, San Qi, Chuan Xiong,
Huang Qi, Bai Zhu, 2',7-Dihydroxy-4',5'-dimethoxyisoflavone

4. Tetrandrine, Celastrol, Artesunate, Triptolide, Andrographolide, Berberine, Sinomenine, Quercetin,
Emodin, Sodium butyrate

5. (Wuwei Wentong Chubi and molecules), BAPTA-AM, Jiang Huang, Yin yang huo, Rougui, Huang Qin,
Fu Ling, Stigmasterol, Gamma-mangostin, Demethylnobiletin, 2-Methoxy-3-methyl-9,10-anthraquinone

6. Ji Xue Teng, Auranofin, Beta-carotene, Epigallocatechin gallate, Beta-Sitosterol, Chenodeoxycholic acid,
Epicatechin, Apigenin, Caffeine, Anethole

7. (Baihu Guizhi and molecules), Zhi mu, Gan Cao, Gui Zhi, Isosinensetin, Isolicoflavonol, Isorhamnetin,
Pseudobaptigenin, Higenamine, Sodium Danshensu, Shi Gao

* RHEUMATOID ARTHRITIS TCM HERBS AND MOLECULES 2

Each group plays for five minutes,

1. (Huangqin Qingre Chubi and molecules), Chebulagic acid, Tao Ren, Yi Yi Ren, Zhi Zi, Chebulanin,
Huang Qin, Wei Ling Xian, 8-Desoxygartanin, 6-Demethoxytangeretin, Amiloride

2. Uralsaponin A, Ursolic acid, Celastrol, Ku Shen, Rosmarinic acid, Yakuchinone A, Yakuchinone B,
Tanshinone IIA, Sorbitol, Vanillin

3. (Xin’an Jianpi Tongbi and molecule), Yi Yi Ren, Jiang Huang, Yin Yang Huo, Rougui, Zhi Zi,
Lei Gong Teng, Huang Qin, Huang Qi, Fu Ling, KZR-8445

4. Militarin, Astragaloside, Bartogenic acid, Puerarin, Nobiletin, Myricetin , Resveratrol, Nicotine,
p-Hydroxybenzoic acid, Naphthalene

5. (Guizhi Shaoyao Zhimu and molecule), Bai Shao, Ma Huang, Fu Zi, Sheng Jiang, Zhi Mu, Gan Cao,
Bai Zhu, Gui Zhi, Fang Feng, Rutamarin

6. Yan Hu Suo, Irisolidone, Gingerol, Fisetin, Wogonin, Formononetin, Daidzein, Lauric acid, Eugenol,
Hexanal

7. (Wutou and molecules), Bai Shao, Ma Huang, Gan Cao, Psalmotoxin 1, Chuan Wu, Huang Qi, Punicalagin,
Dehydroevodiamine, Purpurin, OLT117

8. CRM Caulosides (B, C, D, G, H) and Leonticin D, SR-2211, Pralnacasan, Piclidenoson, Masitinib,
Nimbolide, T-2328, Rabeximod, Sulfasalazine, Norisoboldine

* T2DM DIABETES TCM HERBS-MOLECULES

Antidiabetic, hypoglycemic, regulate blood glucose level, prevent diabetic complications, decrease the risk of atherosclerosis
and cardiovascular disease, R-glucosidase inhibition, enhance insulin production. Each group plays for five minutes,

1. (Xuefuzhuyu and molecules), Tao Ren, Hong Hua, Dang Gui, Chuan Xiong, Chi Shao, Niu Xi, Chai Hu,
Jie Geng, Zhi Ke, Di Huang, Gan Cao, Mecobalamin, Calcium dobesilate, Metformin

2. (Danshen Dripping Pill -CDDP, Shenmai formula and molecules), Danshen, San Qi, and Bing Pian, INT-767, Trimetazidine, Tauroursodeoxycholate (TUDCA), Metoprolol, Ren Shen, Mai Dong, Wu Wei Zi

3. (Mingmu Dihuang pill), Shu Di Huang, Shan Zhu Yu, Mu Dan Pi, Shan Yao, Fu Ling, Ze Xie, Gou Qi Zi,
Ju Hua, Dang Gui, Bai Shao, Ji Li and Tian Ma (Shi Jue Ming substitute)

4. Alpha-Lipoic acid, Prostaglandin E1, Beraprost, Cenderitide, Cilostazol, Pentoxifylline, Pancreatic kallikrein, Azelnidipine, Temocapril, TouGuCao

5. Huang Qi, Dan Shen, San Qi, Jiang Xiang, Da Huang, Hong Hua, Niu Xi, Ji Xue Teng. Crocin. AG1024

6. (Tang luo ning -TLN and molecules), Insulin LS-84079, ferulic acid, Huangqi, Danshen, Chishao, FuZi, CaoWu, GuiZhi,
BaiShao, JiXueTeng

7. (Chuanxiongqin injection, XiXin injection and molecules), Hyodeoxycholic acid, Metformin, Huang Lian, Sheng Jiang,
Dan Shen, Chuan Xiong, Xi Xin, Dorzagliatin, Empagliflozin, Sitagliptin

* T2DM DIABETES TCM MOLECULES

Antidiabetic, hypoglycemic, regulate blood glucose level, prevent diabetic complications, decrease the risk of atherosclerosis
and cardiovascular disease, R-glucosidase inhibition, enhance insulin production. Each group of molecules plays for five minutes,

1. Tanshinone IIA , Soyasaponin A1, Soyasaponin A2, Soyasaponin I, Astragaloside IV, Momordicine II, Fenugreek saponin I, Fenugreek saponin II, Fenugreek saponin III, Charantin

2. Glycyrrhizin, Gypenoside XLIX, Gypenoside XVII, Dioscin, Saikosaponin B2, Platycodin D, Jujuboside A, Afrocyclamin A, Araloside C, Notoginsenoside Fc

3. Clematichinenoside (AR), Cinnamaldehyde, Harmine, Berberine, Leurosine, Vindoline, Aegeline, Koenidine, Vincristine, Vinblastine

4. Calystegine B2, Cryptolepine, Galalpha1-4Gal, Harmane, Norharmane, Pinoline, Vasicine, Jatrorrhizine, Vasicinol, Palmatine

5. Tembetarine, Lepidine, Mahanimbine, Piperumbellactam A, Radicamine A, Radicamine B, Schulzeine A, Schulzeine B, Avarol, Leonurine

6. 5-Hydroxymethylfurfural, Swerchirin, Tecomine, Tecostanine, Javaberine A, Trigonelline, Puerarin,
Ginsenoside Rg3, Ginsenoside Rg1, 4-Hydroxymephenytoin

1.3.3.24 RT-TCM-24

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_24

Bai He Zhi Mu Tang, Gan Cao Gan Jiang Fu Ling Bai Zhu Tang, Gui Pi Tang, Huan Shao Dan, Huo Xue Zhi Tong Tang, Hyperlipoproteinemia #2, Nu Ke Ba Zhen Wan, Qu Han Bi Tang, Rheumatoid Arthritis #1

Recordings Updated in June 2025

* BAI HE ZHI MU TANG - 百合知母汤 - Lily Bulb And Anemarrhena Decoction

ACTIONS - Moistens the Lungs and Heart. Nourishes Fluids. Nourishes Yin. Clears Deficiency Heat. Cools the Blood.

SYNDROMES - Late-stage or aftermath of Ying or Xue Stage Heat with improper purging damaging Stomach Qi. Bai He Bing (Lily Syndrome) with pronounced Upper Jiao symptoms.

CLINICAL MANIFESTATIONS - Mental disorientation. Irritability. Insomnia. Palpitations. Depression. Restlessness. Hopelessness. Sudden mood swings. Erratic behavior. Feels cold then not cold. Feels hot then not hot. Aversion to life. Dry mouth. Dry stools. Dry throat. Fatigue. Coughing. Irregular stools. Lethargy. Mental instability. Obsessions. Craves food then hates food. Does not like to talk. Does not know what he/she wants. Dark urine. A bitter taste in the mouth. Dizziness. Muddled thinking.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Excess Fire in the Lungs and Heart. Contraindicated for those with Yin Deficiency as the main pathology.

HERBS AND ACTIONS

-Bai He - Nourishes Yin, moistens the Lungs, clears Heat, clears the Heart and calms the Spirit. With Zhi Mu, for Irritability and mental disorientation due to Yin Deficiency or lingering Heat in the late stages of febrile disease.

-Zhi Mu - Clears Heat, drains Fire, clears Heat from the Qi Stage, from the Lungs and from the Stomach.

TREATS

Perimenopausal syndrome. Neurosis. Autonomic dystonia. Sleep walking. Hysteria. Fatigue. Depression. Mental confusion. Nervous breakdown. Neurasthenia. Cough. Palpitations.

* GAN CAO GAN JIANG FU LING BAI ZHU TANG - 甘草干姜茯苓白术汤 - Licorice, Ginger, Poria And White Atractylodes Decoction

ACTIONS - Warms Yang. Strengthens the Spleen. Dispels Cold. Eliminates Dampness.

SYNDROMES - Lower Jiao Cold-Damp.

CLINICAL MANIFESTATIONS - Cold pain in the lower back and body. Sciatica. Copious urination. Extreme heavy sensation in the lower back. Absence of thirst.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with heaviness of the body and backache due to Damp-Heat.

HERBS AND ACTIONS

-Gan Jiang - Warms the Middle, expels Cold, rescues Devastated Yang and expels Interior Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Gan Cao, for epigastric pain and vomiting due to Spleen and Stomach Deficiency Cold. With Fu Ling, Gan Cao and Bai Zhu, for Cold-Dampness in the Lower Jiao leading to a sense of heaviness and Cold in the lower back.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Gan Jiang, eliminates Cold Dampness in the Spleen with loss of taste, a sticky sensation in the mouth, nausea, vomiting, diarrhea and a thick, white tongue coat. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness.

TREATS

Low back pain. Sciatica. Lumbago. Enuresis. Gastritis. Diarrhea. Lumbar disc disease. Chronic pelvic inflammatory disease. Acute gastroenteritis. Allergic rhinitis. Superficial gastritis. Atrophic gastritis. Duodenal ulcer. Arthritis. Impotence. Acute lumbar strain. Renal calculi. Benign prostatic hypertrophy. Eczema. Chronic bronchitis.

* GUI PI TANG - 归脾汤 - Restore the Spleen Decoction - Ginseng and Longan Combination. Decoction to Strengthen Heart and Spleen. Angelica Splenic Decoction

ACTIONS - Augments Qi. Nourishes the Blood. Strengthens the Spleen. Nourishes the Heart.

SYNDROMES - Spleen Not Governing Blood. Heart Blood Deficiency. Heart (Blood) and Spleen (Qi) Deficiency due to worry (excessive deliberation or obsession). Atrophy disorder (Wei Syndrome) due to Spleen and Stomach Qi Deficiency.

CLINICAL MANIFESTATIONS - Memory loss. Forgetfulness. Absent-mindedness. Lack of concentration. Menorrhagia. Palpitations with or without anxiety. Insomnia (difficulty falling asleep). Nightmares. Reduced appetite. Pale, wan complexion. Pale lips and nails. Early menstruation with copious pale blood. Continuous flow with little blood (spotting). Excess perspiration. Night sweats. Irregular menstruation. Leukorrhea. Dizziness (mild and postural, worse with sitting or rising or lying down or when fatigued). Blurred vision. Spots before the eyes. Low spirits. Depression. Bruising easily. Dream

disturbed sleep. Short attention span. Anxiety. Phobias. Panic attacks. Fear. Low grade fever. Withdrawal. Fatigue and lethargy. Weakness. Genital itch. Impotence. Nocturnal emissions. Weak abdomen. Abdominal distention after eating. Premenstrual spotting. Dry skin and hair.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Interior Heat. Contraindicated for those with Yin Deficiency with Heat signs.

HERBS AND ACTIONS

-Ren Shen - Tonifies Spleen, Heart and Yuan Qi. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Huang Qi, Bai Zhu and Gan Cao, tonifies the Spleen to generate Blood. With Bai Zhu and Fu Ling, for Spleen and Stomach Qi Deficiency. With Dang Gui, Long Yan Rou and Yuan Zhi, for Heart and Spleen Deficiency.

-Huang Qi - Tonifies Blood and Spleen Qi. With Dang Gui, generates and nourishes Blood. With Ren Shen, for Qi Deficiency with general debility, anorexia, and spontaneous sweat. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Long Yan Rou, Dang Gui and Suan Zao Ren, for insomnia and other signs of Qi and Blood Deficiency.

-Bai Zhu - Strengthens the Spleen and dries Dampness.

-Fu Ling - Strengthens the Spleen and harmonizes the Middle Jiao. With Ren Shen and Huang Qi, tonifies the Spleen. With Ren Shen and Bai Zhu for weak and deficient Spleen with fatigue, anorexia and loose stools. With Gan Cao, for Spleen and Heart Deficiency causing facial edema, palpitations, and short-ness of breath. With Dang Shen, Suan Zao Ren and Long Yan Rou, for insomnia due to Spleen and Heart Insufficiency.

-Suan Zao Ren - Nourishes Heart Yin and tonifies Liver Blood. With Ren Shen, Fu Shen and Long Yan Rou, for insomnia, palpitations and irritability due to Spleen Qi and Heart Blood Deficiency.

-Long Yan Rou - Nourishes the Blood, calms the Shen, and tonifies and nourishes the Heart and Spleen. With Ren Shen, Dang Gui and Suan Zao Ren, for palpitations and insomnia due to Heart Blood Deficiency, especially in cases with Spleen Qi Deficiency.

-Mu Xiang - Regulates Qi, strengthens the Spleen and prevents indigestion due to the rich nature of the other herbs. With Bai Zhu, especially effective.

-Gan Cao - Harmonizes and tonifies Qi. With Fu Ling and Dang Shen, strengthens the Spleen, augments Qi and treats palpitations due to Heart Qi Deficiency. With Ren Shen, relieves palpitations and anxiety.

-Dang Gui - Nourishes and harmonizes the Blood. With Huang Qi, for many Blood Deficiency patterns.

-Yuan Zhi - Calms the Shen, sedates the Heart and opens Orifices. With Suan Zao Ren, it is especially effective because it balances the contracting, introverted and dispersing, extroverted manifestations of Spirit to ensure the proper balance of openness and sobriety. With Fu Shen and Suan Zao Ren, for symptoms of Heart Blood Deficiency. With Suan Zao Ren, Bai Zhu and Dang Gui, for palpitations and insomnia due to Qi Deficiency. With Huang Qi, Dang Gui and Long Yan Rou, for forgetfulness, palpitations and insomnia.

-Sheng Jiang - Aids in strengthening the Spleen. With Da Zao, improves the appetite and regulates the Ying and Wei, facilitating the actions of the formula.

-Da Zao - Nourishes the Blood, calms the Shen, tonifies the Qi and harmonizes. With Bai Zhu and Dang Shen, for weakness and lassitude due to Spleen and Stomach Deficiency. With Sheng Jiang, prevents tonics from generating Dampness in the Middle Jiao.

TREATS

Anemia. Neurasthenia. Spermatorrhea. Anxiety. Post-concussion syndrome. Myasthenia gravis. Congestive Heart disease. Supraventricular tachycardia. Thrombocytopenia. Thrombocytopenic purpura. Allergic purpura. Cervicitis. Functional Uterine Bleeding. Chronic leukemia. Genital itching. Post illness convalescence. Drug abuse. Hypotension. Insomnia. Dizziness. Vertigo. Choroidopathy. Addiction. Irregular menstruation. Infertility. Premenstrual syndrome. Anxiety. Prolonged menstruation. Eyelid twitch. Premature ovarian failure. Optic atrophy. Atrophy (Wei) Syndrome. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. Hematuria. Bi-polar disorder. Fever. Systemic lupus erythematosus. Metrorrhagia. Chronic hepatitis. Viral hepatitis. Neurosis. Schizophrenia. Chronic pancreatitis. Hemorrhoids. Crohn's disease. Forgetfulness. Fatigue. Dysmenorrhea. Congestive Heart failure. Epistaxis. Interstitial cystitis. Spontaneous perspiration. Early menstruation. Indigestion. Dyspnea. Periodontitis. Habitual miscarriage. Dry skin. Ulcerative colitis. Leukopenia. Vaginal prolapse. Diabetes. Fibrocystic breast disease. Impotence. Depression. Menopause. Personality disorders. Gastric ulcer. Duodenal ulcer. Aplastic anemia. Menorrhagia. Uterine cancer. Breast cancer. Chronic bleeding. Prolonged menstruation. Chronic gonorrhea. Nervous exhaustion. Melancholy. Endometritis. Multiple sclerosis. Postpartum convalescence. Headache. Neurological disorders. Benzene poisoning. Scleroderma. Tourette syndrome. Amenorrhea. Childhood eczema. Nictitation. Alopecia. Uterine fibroids. Vaginal discharge. The sequelae of poliomyelitis. Acute infectious multiple neuritis. Progressive myodystrophy. Hysterical paralysis. Periodic paralysis. Facial paralysis. Cor pulmonare. AIDS/HIV. Palpitations. Benzene poisoning. Anxiety neurosis. Cardiac arrhythmia. Chronic fatigue syndrome. Abdominal fullness and distention. Anorexia. Hemafecia. Ulcerative colitis. Memory loss. Weakness.

Hematemesis. Chronic nephritis. Hypertension. Obesity. Meniere's disease. Night sweats. Scanty menstruation. Nocturnal emissions. Strangury. Gingivitis. Endocrine dyscrasia-uterine Cold. Sweating from the chest. Premenstrual breast distention. Colitis. Cervical cancer. Dry hair. Vaginal bleeding due to intercourse. Insomnia associated with AIDS/HIV.

* HUAN SHAO DAN - 還少丹 - Rejuvenation Special Pill. Return to Youth Pill. Pill for Restoring Yang. Lycium Formula

ACTIONS - Tonifies the Spleen and Kidneys. Nourishes the Heart. Enriches the Yin. Nourishes the Blood and Yang. Augments Qi.

SYNDROMES - Jing and Blood Deficiency due to Kidney, Heart and Spleen Deficiency.

CLINICAL MANIFESTATIONS - Fatigue. Heavy and painful lower back. Dream-disturbed sleep. General weakness. Lack of interest in food or drink. Fever. Night sweats. Seminal emission. Forgetfulness. Toothache. Dizziness. Gum swelling. General pitted edema which is worse in the lower body. Vaginal discharge. Discharge of rice-water like urination without dysuria. Aversion to Cold. Impotence. Decreased libido. Emaciation. Loose teeth. Signs of premature aging. Abdominal Cold. Easily frightened.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Jing and Blood and nourishes Liver and Kidney Yin. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu and Shan Yao, for dizziness, weak and sore back, impotence, spermatorrhea and night sweats due to Kidney and Liver Yin Deficiencies. With Shan Zhu Yu, Shan Yao and Wu Wei Zi, for cough, shortness of breath and accelerated respiration.

-Shan Yao - Tonifies the Kidney Yin, astringes Jing, tonifies the Spleen, nourishes Stomach Yin, stops diarrhea, tonifies Lung Qi and nourishes Lung Yin.

-Niu Xi - Invigorates the Blood, expels Blood Stasis and nourishes the Liver and Kidney Yin. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin, benefits Jing and brightens the eyes.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Wu Wei Zi, for spermatorrhea,

abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiencies of the Liver and Kidneys. With Du Zhong, for low back pain and weakness.

-Fu Ling - Strengthens the Spleen, harmonizes the Middle Jiao, quiets the Heart, calms the Spirit and soothes the nerves.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and tonifies Kidney Yang. With Gou Qi Zi, for low back pain.

-Yuan Zhi - Calms the Spirit and sedates the Heart and clears the channel joining the Heart and Kidney.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing, stops diarrhea and spermatorrhea, quiets the Spirit and calms and contains Heart Qi.

-Chu Shi Zi - Tonifies the Liver and Kidney Yin, clears the Liver and clears the eyes and augments Kidney Qi.

-Xiao Hui Xiang - Warms the Liver and Kidneys, expels Cold, and alleviates pain, regulates Qi, and harmonizes the Stomach.

-Ba Ji Tian - Tonifies the Kidneys and strengthens Yang, disperses Wind-Cold-Damp and strengthens sinews and bones. With Niu Xi, soaked in wine for impotence.

-Rou Cong Rong - Tonifies the Kidneys, strengthens the Yang, benefits Jing and marrow and warms the Womb. With Du Zhong, for high blood pressure. With Du Zhong and Ba Ji Tian, for deficient Kidney induced pain and weakness in the lower back with a feeling of weakness in the sinews and bones. With Ba Ji Tian, tonifies Yang without injuring Yin.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm removes filth, calms the Spirit, disperses Wind, promotes Blood flow reduces swelling, alleviates Wind-Damp Bi, transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen and promotes the movement of Qi.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs.

-Sheng Jiang - Warms the Middle and reduces the toxicity of the other herbs - included in some versions. With Da Zao, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen, protects Stomach Qi and reduces irritation of the gastrointestinal. tract by other herbs and prevents tonics from generating Dampness in the Middle Jiao.

TREATS

Listless Spirit. Spermatorrhea. Abdominal Cold. Impotence. Aldosteronism. Hypothyroidism. Prostatitis. Fever. Low back pain. Forgetfulness. Weakness. Dysmenorrhea. Enuresis. Menopause syndrome. Aphasia. Metrorrhagia. Ophthalmological disorders with significant Kidney Deficiency. Decreased libido. Signs of premature aging. Diabetes mellitus. Chronic nephritis. Renal tuberculosis. Vaginal discharge. Anorexia. Amenorrhea. Fatigue. Edema. Infertility. Obesity. Toothache.

* HUO XUE ZHI TONG TANG - 活血止痛汤 - Invigorate The Blood And Alleviate Pain Decoction

ACTIONS - Invigorates the Blood. Dispels Blood Stasis. Unblocks the channels and collaterals. Reduces swelling and bruising. Relieves pain.

SYNDROMES - Blood Stagnation.

CLINICAL MANIFESTATIONS - Traumatic injuries. Pain. Swelling. Inflammation. Bruising. Tissue and bone damage.

HERBS AND ACTIONS

-Xiang Fu - Spreads and regulates Liver Qi and alleviates pain.

-Xue Jie - Invigorates the Blood, dispels Blood Stasis and alleviates pain.

-Er Cha - Stops bleeding and generates flesh.

-Da Huang - Invigorates the Blood and dispels Blood Stasis. With Dang Gui, for Blood Stasis.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Su Mu, for trauma with pain and swelling. With Tao Ren, invigorates the Blood for all types of Blood Stagnation.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Dang Gui - Invigorates and harmonizes the Blood and stops pain due to Blood Stasis. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood. With Xiang Fu, tonifies the Blood and moves Qi.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen.

-Mu Dan Pi - Invigorates the Blood and dispels Blood Stasis.

-E Zhu - Invigorates Blood circulation, dispels Blood Stasis, regulates Qi and alleviates

pain. With San Leng for Qi and Blood Stagnation with clumping and accumulations leading to pain.

-San Leng - Forcefully breaks up Blood Stasis, regulates Qi and alleviates pain.

-Su Mu - Invigorates Blood circulation, dispels Blood Stasis, reduces swellings, opens the channels, stops bleeding and alleviates pain. With E Zhu, strongly promotes the movement of Qi and Blood, breaks up Blood Stagnation and stops pain. With Hong Hua, for traumatic injury with painful, swollen bruises or hematomas.

-Bai Shao - Nourishes the Blood and alleviates pain. With Gan Cao, for muscle spasms, pain and numbness. With Dang Gui, nourishes Yin and Blood.

-Gan Cao - Moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Traumatic injury. Bone fractures. Joint dislocation. Soft tissue injuries.

* HYPERLIPOPROTEINEMIA #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Resolves Dampness.

SYNDROMES - Damp-Heat.

CLINICAL MANIFESTATIONS - Dizziness. Headache. Heavy-headedness. Vexatious Heat. Chest oppression. Stomach fullness. Nausea. Physical fatigue. Listlessness. Heavy limbs. A bitter taste in the mouth. A dry throat. Obesity. Maybe constipation or. Dry stools. Yellow urine.

NOTES - Hyperlipoproteinemia occurs when there is too much lipid (fat) in the blood. Shorter terms that mean the same thing are hyperlipidemia and hyperlipemia. Dyslipidemia refers to a redistribution of cholesterol from one place to another that increases the risk of vascular disease without increasing the total amount of cholesterol. When more precise terms are needed, ypercholesterolemia and hypertriglyceridemia are used.

HERBS AND ACTIONS

-Long Dan - Drains Damp-Heat from the Liver and Gallbladder channels and drains and pacifies Excess Liver Fire. With Da Huang, for rib pain, a bitter taste, red eyes, jaundice, deafness, hot dysenteric disorders, Dampness and swelling of the scrotum, vomiting, epistaxis, fright, mania and constipation due to Liver Fire.

-Che Qian Cao - Clears Heat and detoxifies.

-Ze Xie - Promotes urination, leaches out Dampness and settles Ministerial Fire in the Kidneys by draining Damp-Heat from the lower Jiao. With Fu Ling, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Chai Hu - Spreads Liver Qi and relieves Stagnation.

-Yin Chen - Clears Heat, facilitates the resolution of Dampness, clears Damp-Heat from the Liver and Gallbladder and relieves jaundice.

-Jue Ming Zi - Clears Liver Heat, clears the vision, benefits the eyes, calms the Liver, anchors Liver Yang and reduces blood pressure and serum cholesterol.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao.

-Shan Zha - Reduces and guides out Food Stagnation, transforms accumulations, transforms Blood Stasis, invigorates Blood circulation, dissipates clumps and treats hypertension, elevated serum cholesterol and coronary artery disease.

-Da Huang - Drains Heat, purges accumulations, transforms Dampness and promotes urination. With Yin Chen Hao, for early-Stage Damp-Heat Jaundice when Heat is stronger than Dampness.

TREATS

Hyperlipoproteinemia.

* NU KE BA ZHEN WAN - 女科八珍丸 - Women's Precious Tea Pills. Gynecological Eight Pearls Pills. Gynecology Eight Treasure Pills

ACTIONS - Tonifies Qi and Blood. Regulates Menstruation.

SYNDROMES - Qi and Blood Deficiency.

CLINICAL MANIFESTATIONS - Fatigue. Dizziness. Anemia. Scanty menses. Heart palpitations. Dry hair and skin. Cracked nails. Anorexia. Irregular menstruation. Painful menstruation. Slight or no menstrual flow. Irritability. Pale complexion. Poor memory or concentration.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during the early stages of acute illness such as cold and flu.

NOTES - It should be used only after bleeding has subsided, not during the menstrual period.

HERBS AND ACTIONS

-Dang Gui - Tonifies, Invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis and regulates the menses. With Bai Shao, regulates and harmonizes Qi and Blood. With Gan Cao, moderates spasms and relieves abdominal pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Bai Shao - Nourishes the Blood, regulates menstruation, Softens the Liver, relieves pain and calms Liver Yang. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews. With Dang Gui, nourishes Yin and Blood.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Fu Ling, for Spleen and Stomach Deficiency with fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting. With Bai Zhu, Gan Cao, Dang Gui and Bai Shao, for Qi and Blood Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses, and amenorrhea.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency. With Dang Shen, Fu Ling and Bai Shao, strengthens the Spleen and augments Qi. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

-Hua Shi - Promotes urination and drains Heat from the Urinary Bladder.

TREATS

Anemia. Irregular menstruation. Scanty menstruation. Recovery from childbirth and illness. Optic atrophy. Anorexia. Fatigue. Dry hair. Dysmenorrhea. Amenorrhea.

Hypoglycemia. Premenstrual syndrome. Slow healing of wounds. Forgetfulness. Palpitations.

* QU HAN BI TANG - 祛寒痺汤 - Disperse Cold Rheumatism Decoction

ACTIONS - Warms the Channels. Dispels Cold. Circulates the Blood. Alleviates pain.

SYNDROMES - Wind-Cold Dampness invades the Channels with predominance of Cold. Cold Bi.

CLINICAL MANIFESTATIONS - Aversion to Cold. Cold extremities. Coldness of the affected area. Cold pain. Pain better with warmth. Pain aggravated by Cold. Sharp, stabbing pain. Shoulder pain. Neck pain. Elbow pain. Low back pain. Hand pain. Hip pain. Knee pain. Foot pain. Lack of thirst. Limited joint movement.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat. Contraindicated for those with Yin Deficiency.

HERBS AND ACTIONS

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

-Cao Wu - Expels Wind-Dampness, disperses Cold, warms and activates the channels and stops pain.

-Bai Fu Zi - Dries Dampness, expels Wind, stops spasms, expels Wind-Cold-Dampness from the Upper Jiao and alleviates pain.

-Gui Zhi - Releases the Exterior, warms the channels to relieve pain, disperses Cold, unblocks Yang, transforms Qi, warms and facilitates the flow of Blood and releases the muscle layer. With Ma Huang, for Wind-Cold Bi. With Bai Shao, warms and tonifies the Middle Jiao. With Chuan Wu and Cao Wu for chills, painful extremities and backache due to Yang Deficiency with Wind-Cold-Damp Bi.

-Ma Huang - Releases the exterior and disperses Cold. With Chuan Wu, for Wind-Cold Bi. With Gui Zhi for Wind-Cold-Damp Bi.

-Xi Xin - Releases exterior Wind and Cold, disperses Internal Cold and alleviates pain. With Ma Huang, alleviates Wind-Cold-Damp Bi pain.

-Ma Qian Zi - Unblocks the channels and alleviates pain.

-Ru Xiang - Invigorates Blood, regulates Qi, relaxes the sinews, opens the channels and alleviates pain. With Mo Yao for Blood Stasis obstructing the channels.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis and alleviates pain.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis and alleviates pain.

-Bai Shao - Alleviates pain and nourishes Blood. With Gan Cao, for muscle spasms especially in the calf, due to Blood Deficiency. With Dang Gui, nourishes Yin and Blood.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Bai Shao, regulates and harmonizes Qi and Blood.

-Mu Gua - Relaxes sinews, unblocks the channels and transforms Dampness. With Dang Gui and Bai Shao, for Blood Deficiency causing muscle spasms.

-Gan Cao - Tonifies the Spleen, tonifies Qi, alleviates pain and moderates and harmonizes the properties of the other herbs. With Bai Shao, for spasms of the calf or other muscles.

TREATS

Rheumatic arthritis. Osteoarthritis. Gouty arthritis. Rheumatic lumbago. Hand pain. Neck pain. Hip pain. Rheumatoid arthritis. Periarthritis of the shoulder. Rheumatic myalgia. Sharp, stabbing rheumatic pain. Knee pain. Elbow pain. Foot pain.

* RHEUMATOID ARTHRITIS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Expels Wind-Cold and Dampness. Warms the channels. Invigorates the Blood.

SYNDROMES - Wind-Cold-Damp with Formation of Heat (Mixed Cold and Heat.)

CLINICAL MANIFESTATIONS - Joint redness, swelling, Heat and pain. Stiffness and inflexibility. Initially the pain eases when exposed to coolness. Later, coolness does not help. but warmth does. Dry mouth. Bitter taste in the mouth. Parched throat. Insomnia. Agitation. Irritability.

HERBS AND ACTIONS

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Du Huo, for Wind-Dampness. With Cang Zhu, for a heavy-headed sensation.

-Du Huo - Dispels Wind-Dampness, releases the Exterior and alleviates pain. With Fang Feng, for numbness in the legs. With Qiang Huo, for joint pain and numbness.

-Gui Zhi - Warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels to relieve pain, releases the Exterior, assists Yang and releases the muscle layer.

-Fang Feng - Expels Wind-Dampness and alleviates pain. With Cang Zhu, for pain due to Wind-Dampness Bi with aching joints, heavy limbs and generalized aching discomfort. With Qiang Huo, for Wind-Dampness. With Qiang Huo and Dang Gui, for Wind-Cold-Damp Bi.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, induces sweating, expels Wind-Dampness and clears Dampness from the Lower Jiao.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and disperses Cold.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain.

TREATS

Rheumatoid arthritis.

1.3.3.25 RT-TCM-25

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_25

Bu Yang Huan Wu Tang, Da Ban Xia Tang, Da Ding Feng Zhu, Deficient Bi #3, Hyperthyroid #5, Promoting Blood Circulation and Reducing Pain, Xiao Xian Xiong Tang, Xue Fu Zhu Yu Tang, You Gui Wan

Recordings Updated in June 2025

* BU YANG HUAN WU TANG - 补阳还伍汤 - Tonify Yang to Restore Five-Tenths Decoction

ACTIONS - Tonifies Qi. Invigorates the Blood. Unblocks the channels. Promotes movement in the limbs

SYNDROMES - Sequelae of Wind-Stroke (post cerebral apoplexy syndrome.) Qi and Yang Deficiency with Blood Stasis Obstructing the Channels. Wind-Phlegm causing Qi

and Blood Stagnation. Atrophy (Wei Syndrome) due to Qi Deficiency with Blood Stasis.

CLINICAL MANIFESTATIONS - Hemiplegia. Paralysis. Atrophy of the lower limbs. Facial paralysis. Slurred speech. Drooling. Dry stools. Frequent urination. Urinary incontinence. Deviation of the eyes and mouth. Excess salivation. Cold extremities.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated immediately after a stroke due to cerebral hemorrhage. Contraindicated for those with Wind-Stroke with a big, forceful or firm, wiry, forceful pulse. Contraindicated for those with Yin Deficiency. Contraindicated for those with Blood Heat. Contraindicated for those with Phlegm Stagnation. Contraindicated during pregnancy. Be sure consciousness is returned and the temperature is normal. Be sure there is no hemorrhage present and there is a moderate pulse.

HERBS AND ACTIONS

-Huang Qi - Tonifies source Qi, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, tonifies Wei Qi, stabilizes the exterior, and tonifies the Blood. With Dang Gui, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesia.

-Dang Gui - Invigorates, harmonizes and nourishes the Blood and alleviates pain. With Huang Qi, for many Blood Deficiency patterns. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood, promotes Qi movement, expels Wind and relieves pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis. With Huang Qi for numbness of the limbs.

-Chi Shao - Clears Heat, cools and invigorates the Blood, the Blood, dispels Blood Stasis and eliminates pain.

-Tao Ren - Dispels Blood Stasis, invigorates Blood circulation, descends Qi, and relieves spasms. With Hong Hua, for Rheumatoid arthritis. With Hong, Hua, Dang Gui, and Chi Shao, for trauma with pain.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis and alleviates pain. With Tao Ren, Invigorates the Blood for all types of Blood Stagnation.

TREATS

Sequelae of cerebrovascular accident. Ischemic cerebrovascular disorder. Cerebrovascular infarction. Cerebral arteriosclerosis. Poliomyelitis. Sequelae of poliomyelitis. Acute myelitis. Sciatica. Thromboangitis obliterans. Thrombophlebitis. Post-stroke hemiplegia. Epilepsy. Neuroses. Hypertension. Chronic nephritis. Benign prostatic hypertrophy. Vascular headache. Raynaud's disease. Numbness. Acute

obstructive cerebral vascular disease. Brain trauma. Myasthenia gravis. Multiple sclerosis. Guillain-Barre disease. Progressive muscular dystrophy. Acute infectious multiple neuritis. Frequent urination. Weakness. Dry skin. Chronic hepatitis. Cerebral thrombosis. Cervical spondylosis. Apoplexy. Paralysis. Brain trauma. Arteriosclerosis obliterans. Stroke. Post-stroke sequelae. Nodular erythema nodosum. Panniculitis. Bell's palsy. Neuralgia. Coronary artery disease. Cor pulmonale. Deep vein thrombosis. Varicose veins. Diabetes. Atrophy (Wei) Syndrome. Polyneuritis. Chronic prostatitis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Paresthesia. Amyotrophic lateral sclerosis (ALS). Fatigue. Aphasia. Urinary incontinence. Unilateral pain.

* DA BAN XIA TANG - 大半夏湯 - Major Pinellia Decoction

ACTIONS - Moves Qi. Stops vomiting. Subdues Rebellious Qi. Tonifies Qi

SYNDROMES - Stagnation and Deficiency of Stomach Qi with Rebellion

CLINICAL MANIFESTATIONS - Repeated vomiting of undigested food. Vomiting soon after eating (food intolerance). Fatigue. Weakness. Indigestion. Epigastrium is hard and full. Nausea. Regurgitation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use caution during pregnancy. Use caution with children. Contraindicated for those with an External Invasion (cold, flu, fever).

HERBS AND ACTIONS

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, stops vomiting, harmonizes the Stomach, dissipates nodules and reduces Stagnation. With Ren Shen, for vomiting due to Stomach Deficiency.

-Ren Shen - Tonifies Spleen and Stomach Qi.

TREATS

Vomiting. Pyloric cramps. Pyloric stenosis. Pyloric obstruction. Gastritis. Indigestion. Stomach cancer. Nervous vomiting. Cardiac achalasia. Scleroderma. Esophageal reflux.

* DA DING FENG ZHU - 大定風珠 - Bolus for Serious Endogenous Wind-Syndrome

ACTIONS - Nourishes Yin. Extinguishes Endogenous Wind

SYNDROMES - Endogenous Wind due to Kidney and Liver Yin Deficiency

CLINICAL MANIFESTATIONS - Fatigue. Muscle spasms with alternating flexion and extension of the extremities. Prostration. Clonic convulsions. Dizziness - worse with stress or anger. Insomnia. Dream-disturbed sleep. Night sweats. Sore low back and knees. Nocturnal emissions. Often the patient is on the verge of shock. Low-grade fever. Dry skin.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin and Fluid Deficiency with vigorous pathogenic Qi. Contraindicated for those with Excess Heat.

HERBS AND ACTIONS

-Bai Shao - Nourishes the Blood, astringes Yin, calms Liver Yang and Liver Wind and alleviates pain. With Gan Cao, and Wu Wei Zi, nourishes Yin and softens the Liver.

-Gan Cao - Moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of other herbs. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing and sweat and generates fluids.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates Fluids. With Bai Shao, for Blood Deficiency Heat.

-Mai Dong - Nourishes Yin and moistens the Lungs and Stomach. With Di Huang, for hematemesis or epistaxis due to Yin Deficiency with Excess Heat.

-Huo Ma Ren - Nourishes Yin and moistens Dryness. With Di Huang and Mai Dong, for Yin Deficiency with constipation.

TREATS

Advanced stage epidemic encephalitis. Prostration. Muscular atrophy. Sclerosis of the funiculus lateralis. Tourette syndrome. Sequelae of encephalitis. Essential tremor. Senile tremors. Hyperthyroidism. Coronary artery disease. Stroke. Post-stroke paralysis. Liver fibrosis. Poliomyelitis. Numbness. Parkinson's disease. Anxiety. Low back. Dizziness. Fatigue. Night sweats. Dyspnea. AIDS/HIV. Meningitis. Clonic convulsions. Wilson's disease (hepatocuticular degeneration). Athetosis. Parkinson's disease. Tongue atrophy after radiation treatment. Urticaria. Restless leg syndrome. Post-stroke insomnia. Chorea minor. Encephalitis B. Insomnia. Paresthesia. Hyperthyroidism. Drug abuse. Low-grade fever. Knee pain. Vertigo. Meniere's disease. Perspiration. Dry skin.

* DEFICIENT BI #3 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies the Liver and Kidneys. Strengthens the tendons and bones. Eliminates Damp-Heat. Tonifies Kidney Jing. Relieves rheumatic pain

SYNDROMES - Qi, Blood and Kidney Jing Deficiency with Damp-Heat

CLINICAL MANIFESTATIONS - Weakness of the knees. Soreness of the lower back. Lumbago. Atrophy of the leg muscles. Lower back weakness. Knee pain. Difficulty walking. Emaciation. Impotence. Poor memory. Dizziness. Night sweats. Five Sole Heat. Aggravation of the pain by Damp weather. Pale complexion. Profuse urination at night. Tinnitus. Hair loss. Sensation of warmth. Thirst. Dry skin.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Blood Stagnation. Contraindicated for those with severe accumulation of Damp-Heat.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and fills the Marrow. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Niu Xi - Invigorates the Blood, dispels Blood Stasis, expels Wind, drains Dampness, tonifies the Kidneys and Liver and strengthens the tendons and bones.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and Tonifies Kidney Yang.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Huang Qi, for Qi and Blood Deficiency. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao and drains Kidney Fire. With Cang Zhu, regulates painful obstruction in the legs and knees and eliminates Dampness and clears Heat for Lower Jiao Damp-Heat with pain, swelling, and weakness in the lower limbs. With Du Zhong, Dang Gui and Niu Xi, for Bi syndrome with sore and weak low back and knees.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen, induces sweating, expels Wind-Dampness and clears Dampness from the Lower Jiao. With Huang Bai. for pain, swelling, and weakness of the lower extremities or skin lesions due to Wind-Dampness and atrophy disorder, vaginal discharge and Damp-sores. With Bai Zhu, for musculoskeletal disorders of the arms and shoulders due to Phlegm Stagnation.

-Bai Shao - Nourishes the Blood and astringes Yin. With Dang Gui and Shu Di Huang,

for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Dang Gui, nourishes Yin and Blood.

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain. With Ren Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweat. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Fang Feng and Bai Zhu, for Wei Qi Deficiency with spontaneous sweat.

-Bu Gu Zhi - Tonifies the Kidneys, strengthens Yang, stabilizes Jing and tonifies and warms Spleen Yang.

-Shan Yao - Tonifies the Spleen, tonifies Kidney Yin and astringes Jing. With Ren Shen and Bai Zhu, for decreased appetite and lack of energy due to Spleen Deficiency.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing and tonifies Qi. With Huang Qi, for Yang Deficiency with spontaneous sweat.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin and benefits Jing. With Shu Di Huang, for Liver and Kidney Deficiency.

-Ren Shen - Powerfully tonifies Yuan Qi. With Shu Di Huang, for Qi and Yin Deficiency. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing , benefits the marrow, tonifies the Kidneys and Liver and benefits the Kidneys and Spleen. With Bu Gu Zhi and Du Zhong, for spermatorrhea, premature ejaculation, and low back pain from Kidney Deficiency. With Du Zhong, enriches and tonifies the Kidneys and Liver, astringes Jing, nourishes Kidney Yin, brightens the eyes and encourages the movement of Primal Yang to treat spermatorrhea, premature ejaculation and lower back pain from Kidney Deficiency.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Cang Zhu, for Damp Cold Painful Obstruction. With Huang Qi and Fang Feng, for spontaneous sweat with aversion to Wind due to Wei Qi Deficiency.

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation and unblocks the channels. With Dang Gui and Bai Shao, for Blood Deficiency causing muscle spasms.

-Gu Sui Bu - Tonifies the Kidney Yang, strengthens the sinews and bones, promotes mending of sinews and bones and activates the Blood.

-Fang Feng - Expels Wind-Dampness and alleviates pain. With Huang Qi, prevents Wind from entering the skin. With Cang Zhu, for pain due to Wind-Damp Bi with aching joints, heavy limbs and generalized aching discomfort. With Qiang Huo, for Wind-Dampness.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Cang Zhu, for a heavy-headed sensation.

TREATS

Wei syndrome. Bi syndrome. Difficulty walking. Rheumatic diseases. Osteoarthritis. Chronic rheumatic pain. Osteoarthritis of the lumbar spine. Gouty arthritis. Gonarthrosis. Coxarthrosis. Rheumatoid arthritis. Sciatica. Knee pain. Neuritis. Myasthenia Gravis. Infantile paralysis. Rheumatic lumbago. Osteophytosis of the spine. Gonarthritis. Coxarthritis. Muscular dystrophy. Muscular atrophy. Sequelae of poliomyelitis. Weakness. Dry skin.

* HYPERTHYROID #5 (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes Yin. Clears Heat. Subdues Yang. Transform Phlegm. Scatters nodulation

SYNDROMES - Liver and Kidney Yin Deficiencies with Liver Yang Rising

CLINICAL MANIFESTATIONS - Goiter. Possible nodulations. Possible exophthalmos. Tension around the eyes. Severe, splitting headaches with dizziness. Aversion to Heat. Restlessness. Hot flashes. Both cheeks slightly red. Dizziness. Dry eyes. Blurred vision. Spots before the eyes. Numbness of limbs. Flaccid paralysis. Weakness. Tinnitus. Deafness. Forgetfulness. Throat dry and painful. Five sole heat. Low-grade fever. Night sweats. Irritability. Insomnia. Palpitations. Excess dreams. Stools difficult to pass. Sudden tinnitus or deafness. Flushed face. Red, swollen, painful eyes. Irascibility with violent angry outbursts. Dry mouth. Bitter taste in mouth. Thirst. Vomiting sour or bitter liquid. Increased food intake. Emaciation. Constipation or dry stools. Maybe rib pain. Spermatorrhea. Irregular menses or scanty menses or amenorrhea. Vaginal discharge.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Xuan Shen and Mai Dong, for a dry throat, irritability, a red tongue, and a fast thready pulse due to Devastated Yin with Blazing Fire.

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin, softens hardness and dissipates nodules. With Di Huang and Mai Dong, for constipation due to Dryness.

-Mai Dong - Moistens the Lung, nourishes Stomach Yin, generates fluids, clears the Heart and eliminates irritability. With Di Huang, and Xuan Shen, for thirst, constipation, irritability and low-grade fever due to Stomach Yin Deficiency. With Suan Zao Ren and Di Huang, for irritability and insomnia due to Yin Deficiency.

-Tian Dong - Nourishes Yin, nourishes the Kidneys, clears Lung Heat, moistens the Lungs, generates fluids and resolves Phlegm. With Mai Dong, for dry cough, thirst, and other symptoms due to Yin Deficiency and injured fluids.

-Gou Qi Zi - Nourishes and tonifies the Liver and Kidneys, nourishes the Blood and nourishes Yin.

-Suan Zao Ren - Nourishes Heart Yin, tonifies Liver Blood and calms the Spirit. With Bai Zi Ren, strongly quiets the Spirit, calms the emotions, enriches the Yin and Blood, stops nightsweats and treats palpitations, irritability and insomnia due to Yin and Blood Deficiency failing to nourish the Heart and Liver and is effective for patients with concurrent constipation.

-Ban Xia - Dries Dampness, transforms Phlegm and descends Rebellious Qi. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Ban Xia, expels Phlegm and stops nausea and vomiting. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention, and anorexia due to congested fluids.

-Chuan Lian Zi - Clears Heat, clears Dampness and regulates Qi.

-Yuan Zhi - Calms the Spirit, sedates the Heart, expels Phlegm, opens the Orifices, clears the Lungs, reduces abscesses and dissipates swellings. With Suan Zao Ren, balances the contracting, introverted and dispersing, extroverted manifestations of Spirit to ensure the proper balance of openness and sobriety.

-Bai Zi Ren - Nourishes the Heart, calms the Spirit and astringes Yin Deficiency sweat. With Yuan Zhi and Suan Zao Ren, for insomnia, and palpitations due to Heart Blood Deficiency. With Wu Wei Zi for night sweats due to Yin Deficiency.

-Wu Wei Zi - Contains leakage of Lung Qi, tonifies Qi, nourishes Kidney Yin, astringes sweat, generates fluids, tonifies the Heart and calms the Spirit. With Suan Zao Ren and Di Huang, for Heart Deficiency with insomnia, irritability, and forgetfulness.

-Kun Bu - Clears Heat, resolves Phlegm and softens Phlegm nodules.

-Hai Zao - Resolves Phlegm, softens Phlegm nodules, clears Heat, promotes urination and reduces swelling. With Kun Bu, for goiter and scrofula.

-Chen Pi - Regulates Qi, tonifies the Spleen, adjusts the Middle, dries Dampness and transforms Phlegm. With Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and relieves toxicity. With Di Huang, for insomnia and delirium due to unremitting Heat injuring the Ying level.

TREATS

Hyperthyroidism.

* PROMOTING BLOOD CIRCULATION AND REDUCING PAIN (Topical Powder)

ACTIONS - Invigorates the Blood

SYNDROMES - Blood Stagnation

CLINICAL MANIFESTATIONS - The local skin of the affected area is dark purple in color. There are some hard cord-like subcutaneous swollen masses which are not painful when they are pressed.

HERBS AND ACTIONS

-Tou Gu Cao - Invigorates Blood circulation, breaks Blood Stasis, reduces swelling, generates flesh, clears Heat, eliminates toxins, cools the Blood and relieves pain (topically), dispels Wind and Dampness and relaxes the muscles and sinews.

-Yan Hu Suo - Invigorates the Blood, circulates Qi, stops pain and disperses extravasation. With Ru Xiang and Mo Yao, for pain due to trauma.

-Dang Gui - Invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis, reduces swelling, expels pus and generates flesh.

-E Zhu - Invigorates Blood circulation, dispels Blood Stasis regulates Qi and alleviates pain. With Su Mu, breaks up Blood Stasis.

-Hai Tong Pi - Dispels Wind-Dampness, unblocks the channels and collaterals, treats itching skin lesions and kills parasites.

-Wei Ling Xian - Dispels Wind-Dampness, unblocks the channels and alleviates pain.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, invigorates the channels, alleviates pain,r educes swelling and generates flesh. With Mo Yao, for Blood Stasis obstructing the channels with epigastric, flank abdominal and joint pain. With Yan Hu Suo, for chest and abdominal pain.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain, reduces swelling, generates flesh and promotes healing. With Hong Hua, for chest and abdominal pain, amenorrhea and dysmenorrhea due to Blood Stasis. With Ru Xiang, topically as a

powder for skin lesions and ulcerations.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction and alleviates pain.

-Bai Zhi - Expels Wind, eliminates Dampness, reduces swelling, eliminates toxins and expels pus. With Qiang Huo, for Wind-Cold Dampness causing fever, chills and headaches.

-Su Mu - Invigorates Blood circulation, dispels Blood Stasis, reduces swellings, opens the channels and alleviates pain. With Ru Xiang and Mo Yao, for trauma-induced pain and swelling.

-Wu Jia Pi - Dispels Wind-Dampness, nourishes and warms the Liver and Kidneys and strengthens sinews and bones.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Su Mu, for trauma with pain and swelling.

-Tu Fu Ling - Relieves toxicity, eliminates Dampness, benefits the joints and clears Damp-Heat from the skin.

TREATS

Chronic phlebitis topically.

* XIAO XIAN XIONG TANG - 小陷胸汤 - Minor Decoction (for Pathogens) Stuck in the Chest

ACTIONS - Clears Heat. Transforms Phlegm. Expands the chest. Dissipates Stagnation

SYNDROMES - Phlegm and Heat Accumulation Beneath the Heart. Phlegm-Heat Stagnation in the chest

CLINICAL MANIFESTATIONS - Focal distention in the chest and epigastrium with or without nodules which is painful when pressed. Coughing up yellow, viscous sputum. Constipation. A bitter taste in the mouth.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with significant Spleen and Stomach Deficiency.

HERBS AND ACTIONS

-Gua Lou - Clears Lung Heat, transforms Hot Phlegm, regulates Qi (unbinds the chest), reduces abscesses, dissipates nodules and eliminates pus. With Huang Lian and Ban

Xia, for Phlegm-Heat accumulating in the chest and epigastrium that is painful when pressed with coughing of thick, yellow sputum (Xiong Bi due to Phlegm and Heat Accumulation Beneath the Heart).

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Qi and alleviates nausea.

TREATS

Hepatitis. Cholecystitis. Acute pancreatitis. Biliary reflux gastritis. Erosive gastritis. Peptic ulcer. Biliary ascariasis. Pyloric obstruction. Upper respiratory tract infection. Pleurisy. Reflux esophagitis. Pulmonary Heart disease. Cough. Exudative pleurisy. Dyspepsia. Acid reflux. Blepharitis. Acne. Acute pericarditis. Costochondritis. Chronic pancreatitis. Congestive Heart failure. Indigestion. Pleurisy with effusion. Pneumonia. Acute bronchitis. Asthma. Bronchiectasis. Spontaneous pneumothorax. Cerebrovascular disease. Psychosis. Insomnia. Gastritis. Acid reflux. Silicosis. Pulmonary tuberculosis. Cholelithiasis. Intercostal neuralgia. Coronary Heart disease. COPD. Hiatus hernia. Psychogenic chest pain. Smoke inhalation. Dysphagia. Acute infectious gastroenteritis. Constipation.

* XUE FU ZHU YU TANG - 血府逐淤湯 - Drive out Stasis in the Mansion of Blood Decoction

ACTIONS - Invigorates the Blood. Dispels Blood Stasis. Spreads Liver Qi. Unblocks the channels. Stops pain

SYNDROMES - Heart Blood Stagnation. Blood Stagnation of the chest and diaphragm. Blood Stasis in children, usually when fever, pain and insomnia develop after trauma

CLINICAL MANIFESTATIONS - Chronic stabbing pain in the chest. Pain in the hypochondrium. Chronic, stubborn headache with a fixed, piercing quality. Palpitations. Chronic incessant hiccups. Five Sole Heat. Choking sensation when drinking. Dry heaves. Depression or low spirits with a sensation of warmth in the chest. Chest distention. Dry, scaly skin. Dark rings under the eyes. Spider naevi on the cheeks, nose, trunk, inner knee and ankle. Dizziness. Chronic tinnitus. Chronic gum disease with dark, purplish, patchy or dark, red atrophic gums. Loose teeth. Painful receding gums. Frequently bleeding gums. Vomiting after intake of water. Persistent daytime drowsiness. Insomnia (persistent with much dreaming). Restless sleep. Forgetfulness. Irritability. Fidgeting. A bad temper. Extreme mood swings. Evening tidal fever. Dark or purplish lips, conjunctiva or nail beds. Dark complexion. Dark sclera. Hair loss on the head and body.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy. Contraindicated for those with Excess menstrual bleeding. Contraindicated

for the weak or debilitated. Contraindicated for those with active hemorrhage disorders.

NOTES - This is an excellent formula for all Blood Stagnation problems, particularly those affecting the upper body.

HERBS AND ACTIONS

-Tao Ren - Dispels Blood Stasis and invigorates Blood. With Hong Hua and Chuan Xiong, invigorates Blood and dispels Stagnation, especially in the upper body. With Hong Hua, Dang Gui and Chi Shao, for menstrual pain, amenorrhea or irregular menstruation due to Blood Stasis and trauma with pain.

-Hong Hua - Invigorates Blood, dispels Blood Stasis and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis. With Tao Ren, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain. With Tao Ren, Dang Gui, Chuan Xiong and Chi Shao, for menstrual pain or amenorrhea.

-Dang Gui - Nourishes and invigorates Blood. With Chi Shao, invigorates Blood primarily in the lower body and nourishes and moistens Dryness. With Di Huang, dispels Blood Stasis without injuring Yin and Blood. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis. With Gan Cao, moderates spasms and relieves abdominal pain. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood, disperses Blood Stasis and treats abdominal pain.

-Chuan Xiong - Invigorates Blood, regulates Qi and alleviates pain. With Chai Hu and Chi Shao, for Qi and Blood Stagnation generating headache and/or chest pain. With Tao Ren, Hong Hua and Dang Gui, for abdominal pain accompanying menstruation, pain due to trauma and headache from Blood Stagnation. With Tao Ren, Hong Hua, Dang Gui and Chai Hu, for sharp stabbing pain in the chest and hypochondriac area due to Blood Stagnation.

-Chi Shao - Activates Blood, dispels Blood Stasis, clears Heat and alleviates pain. With Chuan Xiong and Dang Gui, for Blood-Stasis induced gynecological disorders such as immobile abdominal masses and amenorrhea with abdominal pain. With Tao Ren, for Blood Stasis induced menstrual disorders, especially those characterized by early period, excessive bleeding, and thick purple clots. With Tao Ren, Hong Hua and Chuan Xiong, for Blood Stagnation in the chest.

-Niu Xi - Eliminates Blood Stasis, descends Qi and Blood and invigorates Blood. With Tao Ren, Hong Hua and Dang Gui, for menstrual pain, irregular menstruation and postpartum pain.

-Chai Hu - Spreads Liver Qi, relieves Stagnation, raises Yang and resolves Phlegm. With Zhi Ke, for a stifling sensation in the chest. With Zhi Ke and Jie Geng, expands the chest and promotes Qi movement which circulates Blood. With Gan Cao, for hepatitis

and upper right quadrant pain.

-Jie Geng - Directs the actions of the formula to the upper body.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure and resolves hardenings.

-Di Huang - Cools Blood and clears Heat. With Niu Xi, powerfully clears Deficiency Fire Blazing Upward with pain and swelling of the gums, epistaxis, hematemesis and other hemorrhage in the upper body.

-Gan Cao - Regulates and harmonizes the other herbs. With Jie Geng, for pain and swelling of the throat.

TREATS

Coronary artery disease. Hypertension. Cor pulmonale. Rheumatic valvular heart disease. Intercostal neuralgia. Costochondritis. Post concussion syndrome. Migraine. Trigeminal neuralgia. Psychosis. Menopausal syndrome. Primary dysmenorrhea. Depression. Chronic hepatitis. Chronic pancreatitis. Thrombosis. Cardiac ischemia. Stroke. Cerebral arteriosclerosis. Hyperlipidemia. Insomnia. Mammary gland hyperplasia. Schizophrenia. Post traumatic shock syndrome. Post traumatic stress syndrome. Cerebral tumors. Gingivitis. Palpitations. Chronic prostatitis. Myocardial infarction. Hemoptysis. Headache. Alopecia. Cough. Hiccups. Uterine fibroids. Lung cancer. Chronic obstructive pulmonary disease. Chronic asthma. Stomach cancer. Neonatal jaundice. Anemia. Nausea/Vomiting. Behcet's disease. Somnambulism. Tinnitus. Peritoneal tuberculosis. Hemorrhoids. Dizziness. Allergic purpura. Impotence. Dyspnea. Upper back pain. Subarachnoid hemorrhage. Painful obstruction. Cirrhosis of the Liver. Cancer pain. AIDS/HIV/ARC with a fever. Pelvic inflammatory disease. Amenorrhea. Acne vulgaris. Urticaria. Dysmenorrhea. Endometriosis. Premenstrual syndrome. Irregular menstruation. External injury. Traumatic chest injury. Paralysis. Angina pectoris. Costalgia. Functional neurosis. Ascites. Thoracic strains. Hysteria. Peptic ulcers. Embolism. Bradycardia. Concussion. Post-concussion syndrome. Pneumothorax. Vascular headache. Phlebitis. Pelvic inflammatory disease. Mitral stenosis. Post traumatic insomnia. Chronic, difficult periodontitis. Acid regurgitation. Obesity. Cardiac arrhythmia. Polycystic ovary syndrome. Breast cancer. Premature ovarian failure. Bartholinitis. Optic atrophy. Diabetes. Pulmonary tuberculosis. Emphysema. Crohn's disease. Esophageal cancer. Viral carditis. Fever. Amyotrophic lateral sclerosis (ALS). Prostatic hypertrophy. Neurosis. Deafness. Chronic glomerulonephritis. Forgetfulness. Vertigo. Hematemesis. Infertility. Dry skin. Systemic lupus erythematosus. Urolithiasis. Coronary Heart disease. Ear pain. Poor vision associated with AIDS/HIV.

* YOU GUI WAN - 右歸丸 - Restore the Right (Kidney) Pill

ACTIONS - Warms and tonifies Kidney Yang. Replenishes Jing. Tonifies the Blood

SYNDROMES - Kidney Yang Deficiency with waning of Ming Men Fire (with Spleen and Stomach Deficiency Cold). Atrophy disorder (Wei Syndrome) due to Kidney Qi and Yang Deficiency

CLINICAL MANIFESTATIONS - Exhaustion from long-term illness. Low energy. Lethargy. Aversion to Cold. Coolness of the extremities. Impotence. Spermatorrhea. Aching and weakness of the lower back and knees. Infertility. Premature ejaculation. Seminal emission. Loose stools (sometimes with undigested food). Incontinence of urine. Edema of the lower extremities. Pale face. Spontaneous perspiration. Dizziness. Enuresis.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated when Kidney Deficiency is accompanied by Dampness or turbidity. Avoid cold and raw foods while taking this formula. This formula has been shown to be effective in reversing corticosteroid-induced immune suppression.

HERBS AND ACTIONS

-Fu Zi - Warms Ming Men Fire and assists Heart, Kidney and Spleen Yang. With Shu Di Huang and Rou Gui, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and sore back and legs, impotence, and urinary frequency. With Rou Gui, powerfully tonifies Kidney Yang, for Kidney Yang Deficiency with lower back pain and weakness in the legs and knees and Deficiency of Ming Men Fire with impotence or infertility.

-Rou Gui - Warms the Kidneys, Spleen and Heart and strengthens Yang and Ming Men Fire and assists the generation of Qi and Blood.

-Shu Di Huang - Tonifies the Blood, nourishes the Yin and nourishes Jing and Blood. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Dang Gui and Shu Di Huang, for night sweats due to Yin Deficiency. With Shu Di Huang and Shan Yao , for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency.

-Shan Yao - Strongly tonifies the Kidneys and astringes Jing. With Shan Zhu Yu, for Kidney Deficiency with spermatorrhea and night sweats.

-Gou Qi Zi - Nourishes and tonifies the Liver and Kidneys, benefits Jing and brightens the eyes. With Shu Di Hang, for Liver and Kidney Deficiency. With Shu Di Huang, Fu Zi and Rou Gui, for Kidney Yang Deficiency.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine and benefits marrow. With Du Zhong, enriches and tonifies the Kidneys and Liver, astringes Jing, nourishes Kidney Yin , brightens the eyes and encourages the movement of Primal Yang to treat spermatorrhea, premature ejaculation and lower back pain from Kidney Deficiency.

-Du Zhong - Tonifies the Kidneys and Liver, tonifies Kidney Yang and strengthens the sinews and bones. With Shan Zhu Yu and Tu Si Zi, for Impotence and frequent urination due to Deficiency Cold of the Kidneys.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and disperses Cold. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

TREATS

Nephrotic syndrome. Osteoporosis. Infertility. Impotence (especially due to low sperm count). Anemia. Leukopenia. Spermatorrhea. Metrorrhagia. Irregular menstruation. Multiple sclerosis. Chronic pelvic inflammatory disease. Premature ovarian failure, prevention. Dizziness. Vertigo. Erectile dysfunction. Myasthenia gravis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Prostatic hypertrophy. Polyuria. Senility. Myalgic encephalomyelitis. Knee pain. Fatigue. Hyperlipoproteinemia. Chronic glomerulonephritis. Headache. Vaginal discharge. Heart palpitations. Spontaneous perspiration. Dyspnea. Abdominal pain. Gingivitis. Amenorrhea. Post-menopausal uterine bleeding. AIDS/HIV/ARC. Neurosis. Chronic fatigue syndrome. Asthma. Frequent urination. Chronic nephritis. Diabetes. Sciatica. Lumbago. Hypertrophic myelitis. Late menstruation. Retinitis Pigmentosa. Obesity. Polycystic ovary syndrome. Glaucoma. Blepharitis. Optic atrophy. Atrophy (Wei) Syndrome. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Hypothyroidism. Addison's disease. Sperm abnormality. Epstein-Barr virus syndrome. Forgetfulness. Weakness. Dysphagia. Edema of the lower extremities. Epistaxis. Interstitial cystitis. Menopause. Meniere's disease. Nocturnal emissions. Strangury. Periodontitis. Neck stiffness. Urinary incontinence. Chemotherapy for breast cancer. Prematurely gray hair.

1.3.3.26 RT-TCM-26

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_26

Da Qin Jiao Tang, Fang Feng Tong Sheng San, Ge Hua Jie Cheng San, Huo Xue San Yu Tang #2, Liang Xue Xiao Feng San, Qi Xu Xue Yu Tang, Shen Fu Zai Zao Wan, Tuo Li Xiao Du Yin, Wen Dan Tang

Recordings Updated in June 2025

* DA QIN JIAO TANG - 大秦韮湯 - Major Large Gentian Decoction

ACTIONS - Dispels Wind. Clears Heat. Circulates Qi. Dredges the channels. Nourishes and invigorates the Blood. Harmonizes the Ying and Wei

SYNDROMES - Early-stage and middle-stage Wind Stroke. Wind-Heat Bi. Wind-Predominant Bi

CLINICAL MANIFESTATIONS - Whole body numbness. Deviation of mouth and eyes. Numbness of skin. Dysphagia due to stiffness of the tongue. Hemiplegia. Rigidity of the extremities. Spasms of the extremities. Aversion to Cold. Fever. Chills. Aching joints. Tingling of the skin. Paralysis of the extremities. Numbness and lack of sensation in the hands and feet. Common cold (with above symptoms). Inability to walk. Wandering joints pain

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those in a coma. Contraindicated for those with convulsions. Contraindicated for those with Internal Wind. Use with extreme caution for those with Blood or Yin Deficiency.

NOTES - Modern research says this formula acts to relieve inflammation, stop fever, calm the mind, stop pain and promote blood circulation. This formula can be used when Wind, Cold, Dampness and Heat are severe.

HERBS AND ACTIONS

-Qin Jiao - Clears Heat, expels Wind-Dampness, relaxes the sinews, clears Deficiency Heat and resolves Dampness (good for cramps in the limbs). With Fang Feng, Du Huo and Qiang Huo for Wind-Cold-Damp Bi. With Dang Gui and Bai Shao, for Blood Deficiency with hemiplegia, especially with excess muscle tension in the upper extremities.

-Gan Cao - Tonifies the Spleen, tonifies Qi clears Heat, moderates spasms, alleviates pain and moderates and harmonizes the harsh properties of the other herbs. With Bai Shao, for abdominal pain, intestinal spasms and spasms of the calf or other muscles. With Dang Gui for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness and paralysis.

-Chuan Xiong - Activates the Blood, regulates Qi, expels Wind-Cold and alleviates pain (good for headaches). With Dang Gui for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis. With Di Huang and Bai Shao, for headache due to Blood Deficiency. With Xi Xin, for Wind-Cold headaches and Shao Yin

Cold headaches. With Dang Gui, Shu Di Huang, and Bai Shao, for headache from Blood Deficiency.

-Dang Gui - Nourishes the Blood, invigorates and harmonizes the Blood, disperses Cold and stops pain. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Gan Cao, moderates spasms and relieves abdominal pain. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. With Qiang Huo, Chuan Xiong and Qin Jian, for postpartum Bi syndrome.

-Bai Shao - Nourishes Blood, astringes Yin, soothes Liver, relieves pain and adjusts the Ying and Wei. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision and dysmenorrhea due to Blood Deficiency or Stasis. With Du Huo and Qin Jiao, for chronic Bi Syndrome with injury to Qi and Blood leading to spasms of the extremities.

-Xi Xin - Releases exterior Wind and Cold, disperses internal Cold, warms the Lungs, alleviates pain, disperses and unblocks the Qi of the nasal orifices and circulates water. With Di Huang for headache and toothache due to Wind-Heat. With Chuan Xiong, for Wind-Cold headache, toothache and Bi pain. With Chuan Xiong and Fang Feng, for Bi syndrome. With Bai Zhi, for Wind-Cold toothache. With Qiang Huo and Fang Feng, for Wind-Cold. With Du Huo, for joint pain due to Wind-Cold-Dampness.

-Qiang Huo - Releases the exterior, dispels Wind-Cold-Dampness from the upper Tai Yang, opens the channels, vitalizes vessels, stops pain and guides Qi to the Tai Yang and Du Channels. With Chuan Xiong for headache and generalized body aches and pains associated with the common cold or painful obstruction. With Fang Feng for pain due to Wind-Dampness. With Du Huo, for Wind-Dampness. (Qiang Huo is better for superficial Wind-Dampness and upper extremities and Du Huo is better for deeper Wind-Dampness and lower extremities). With Bai Zhi for headaches. With Bai Zhi, Fang Feng, Xi Xin and Chuan Xiong, for Wind-Cold with aversion to Cold, fever, headaches and muscle aches.

-Fang Feng - Releases the exterior, expels Wind-Cold-Dampness, stops pain, stops spasms and moves Qi. With Qin Jiao, for Wind Dampness Bi with spasms of the tendons or numbness of the limbs and pain due to Wind-Dampness in patients with Blood Deficiency. With Qiang Huo and Dang Gui, for Wind-Cold-Damp Bi.

-Huang Qin - Clears Lung Heat, drains Fire and dries Dampness.

-Shi Gao - Clears Heat, drains Fire, clears excess Heat from the Lungs, and relieves muscles. With Shu Di Huang, for headache, toothache, and thirst due to raging fire caused by devastated Yin. With Di Huang, for Excessive Fire with injured fluids.

-Bai Zhi - Expels Wind, alleviates pain and headache, and expels Dampness. With Xi Xin, for Wind-Cold induced headaches, sinus headaches and orbital headaches. With

Chuan Xiong, for headaches.

-Bai Zhu - Tonifies the Spleen, tonifies Qi, dries Dampness, and stabilizes the exterior.

-Di Huang - Clears Heat, cools the Blood and nourishes Yin and Blood. With Bai Shao, for Blood Deficiency Heat. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and devastated Blood.

-Shu Di Huang - Nourishes Blood and Yin and strengthens Liver and Kidneys. With Dang Gui and Bai Shao, for dizziness, palpitations, insomnia and menstrual dysfunction due to Blood Deficiency.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao, pacifies the Heart, calms the Shen and soothes the nerves. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Du Huo - Releases the exterior, dispels Wind-Cold-Dampness, opens the channels, vitalizes vessels and stops pain. With Qin Jiao, expels Wind-Cold-Damp, relieves arthralgia and stops pain. With Xi Xin and Qin Jiao, for Wind-Damp Bi causing numbness, pain and soreness in the neck, back and lower extremities. With Fang Feng, for numbness in the legs. With Qiang Huo, for joint pain and numbness.

TREATS

Apoplexy. Stroke. Rheumatism. Bell's palsy. Rheumatoid arthritis. Cerebral hemorrhage. Arthritis. Muscle atrophy. Numbness. Dysphagia. Sjogren's Syndrome. Facial paralysis. Rheumatic arthritis. Multiple neuritis. Thrombotic stroke. Cerebral embolism. Hemiplegia. Fibromyalgia. Paresthesia. Fever. Aphasia. Polymyositis.

* FANG FENG TONG SHENG SAN - 防风通圣丸 - Pills of Ledebouriella with Magical Therapeutic Effects

ACTIONS - Disperses Wind. Releases the Exterior. Drains Heat. Unblocks the bowels

SYNDROMES - Heat Excess in the Exterior and Interior. Simultaneous Tai Yang, Yang Ming, Shao Yin Heat disorder. Good for all Wind-Heat disorders with constipation, dark, rough urination, facial sores and red, sore eyes. which can lead to Internal Wind with a stiff tongue and clenched fists.

CLINICAL MANIFESTATIONS - Dizziness. Red, sore eyes. Difficulty swallowing. Nasal congestion and infection. Thick, sticky nasal discharge and saliva. Bitter taste in the mouth. Dry mouth. Focal distention in the chest and diaphragm. Stifling sensation in the chest and diaphragm. Manic behavior. Carbuncles. Heat rash. Headache. Acne. Chills. High fever. Restlessness. Urticaria. Sore throat. Swelling of the throat. Coughing. Reddish urine. Dyspnea. Vertigo. Severe aversion to Cold. Skin rashes. Skin ruptures or

ulcers. Tense abdomen. Shoulder stiffness. Numb extremities. Fatigue. Constipation. Dysuria with reddish urine. Dark, rough urination. Obesity. Fullness of the abdomen. Fullness of the epigastrium. Heaviness in the head.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Deficiency. Contraindicated during pregnancy. Use caution for those with sensitive digestion.

HERBS AND ACTIONS

-Fang Feng - Releases the exterior, expels External Wind, expels Internal Wind and stops spasms. With Bo He, Huang Qin, Jing Jie and Lian Qiao, for Wind-Heat.

-Ma Huang - Releases the exterior moves Lung Qi, stops wheezing and promotes urination. With Shi Gao, for cough from Heat Obstructing the Lungs with wheezing and flaring of nostrils.

-Da Huang - Drains Heat, purges accumulations and reduces Fire toxicity. With Mang Xiao, drains Heat through the stool.

-Mang Xiao - Purges accumulations, eliminates Stagnation, clears Heat, softens hardness and moistens Dryness. With Da Huang, for constipation due to Heat in the Stomach and Intestines.

-Jing Jie - Releases the exterior, expels Wind, moves Qi, vents rashes and relieves itching. With Bo He, releases the exterior to induce sweating, disperses Wind-Heat, vents rashes and alleviates itching. With Fang Feng, for exterior Excess and initial-stage boils.

-Bo He - Disperses Wind-Heat, cools and clears the head and eyes, benefits the throat and vents rashes.

-Zhi Zi - Clears Heat, reduces Fire and eliminates irritability.

-Hua Shi - Promotes urination and drains Heat.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, clears Excess Heat from the Lungs, clears Blazing Stomach Fire, heals sores and wounds, nourishes Body Fluids and stops thirst.

-Lian Qiao - Clears Heat, relieves toxicity and expels external Wind-Heat.

-Huang Qin - Clears Lung Heat and drains Fire.

-Jie Geng - Opens Lungs, spreads Lung Qi, expels Phlegm, expels pus, benefits the throat and directs the effects of other herbs to the upper body. With Gan Cao, for

hoarseness, pain and swelling of the throat due to Wind-Heat. With Dang Gui, for ulcerated abscess where pus is being discharged slowly.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold, alleviates pain and treats headaches.

-Dang Gui - Moistens Intestines, unblocks bowels, reduces swelling, expels pus, generates flesh and alleviates pain.

-Bai Shao - Nourishes Blood and alleviates pain. With Chuan Xiong and Bai Shao, for harmonizing the Blood to Dispel Wind.

-Bai Zhu - Tonifies the Spleen and tonifies Qi to protect the Spleen from the harmful effects of the other herbs.

-Gan Cao - Tonifies the Spleen, tonifies Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the properties of other herbs. With Jie Geng, benefits the throat to improve swallowing.

-Sheng Jiang - Releases the exterior, stops cough and reduces the toxicity of other herbs.

TREATS

Influenza. Erysipelas. Food poisoning. Carbuncles. Urticaria. Dermatitis. Mania. Acne. Heat rash. Obesity. Hypertension. Skin rupture or ulcers. Conjunctivitis. Eczema. Poliomyelitis. Infectious mononucleosis. Headache. Mumps. Obesity. Migraine headache. Abscesses. Hyperlipidemia. Cardiac asthma. Beriberi. Nasal suppuration. Otitis media. Dizziness. Fatigue. Dyspnea. Eye pain. Red eyes. Sore throat. Acute cellulitis. Acute lymphangitis. Cardiac disorders. Apoplexy. Arteriosclerosis. Diabetes. Chronic nephritis. Asthma. Scabies. Red nose. Alopecia. Hemorrhoids. Sciatica. Arthritis. Nasal suppuration. Psoriasis. Furuncles. Common cold. Habitual constipation. Facial boils. Sores. Acute mastitis. Alcoholism. Early-stage gingivitis. Lymphangitis. High fever. Vertigo. Infertility. Otorrhea. Ear pain. Hangover.

* GE HUA JIE CHENG SAN - 葛花解酲散 - Pueraria Flower Powder for Detoxification and Awakening

ACTIONS - Separates and reduces alcohol-Dampness. Warms the Middle. Strengthens the Spleen and Stomach. Clears Damp-Heat

SYNDROMES - Hangover from alcohol consumption. Spleen and Stomach Damp-Heat. Spleen and Stomach Deficiency Cold with Retention of Dampness. Spleen and Stomach Retention of Cold-Dampness

CLINICAL MANIFESTATIONS - Hangover. Headache. Heart irritability. Trembling of the hands and feet. Chest and diaphragm distention. Reduced appetite. Dizziness. Hypochondriac pain. Nausea. Vomiting sour and bitter fluids. Yang jaundice (sclera and skin bright yellow). Pain and fullness in ribs on both sides. Maybe pain in the right hypochondrium. Bitter taste in mouth. Anorexia. Maybe alternating chills and fever. Concentrated, dark urine. Fatigue. Diarrhea. Loose stools. Inhibited urination. Abdominal distention. Women:. Yellow vaginal discharge with foul smell. Pruritis vulvae. Men:. Pain, swelling and burning sensations of testicles.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Do not take long-term.

HERBS AND ACTIONS

-Dou Kou - Promotes the movement of Qi, aromatically transforms Dampness, strengthens the Stomach, warms the Middle Jiao, descends Qi and stops vomiting. With Sha Ren, for fullness and a stifling sensation in the chest, epigastric pain and fullness, nausea, vomiting, diarrhea, anorexia and a thick tongue coat due to Qi Obstruction from Cold-Dampness. With Chen Pi, for fullness and discomfort in the chest and abdomen, belching, nausea, vomiting, and diarrhea due to Spleen and Stomach Deficiencies with turbid Dampness Accumulation.

-Sha Ren - Promotes the movement of Qi, aromatically transforms Dampness, strengthens the Spleen, stops vomiting, warms the Middle and stops diarrhea. With Mu Xiang, increases the flow of Qi in the digestive system while reducing distention and Food Stagnation, alleviating pain and strengthening the Spleen. With Chen Pi, for Dampness obstructing the Spleen's transforming and transporting functions with reduced intake of food and diarrhea, belching, nausea, and a stifling sensation in the epigastrium due to Disharmony of the Stomach Qi and vomiting of unadulterated, or scanty but viscous fluids. With Bai Zhu and Ren Shen, for Spleen and Stomach Deficiency.

-Ge Hua - Relieves hangovers, awakens the Spleen to treat headaches, fever, irritability, thirst, a feeling of fullness and bloating in the chest and diaphragm and vomiting from excessive use of alcohol. With Dou Kou, Chen Pi and Ren Shen, for treatment of hangovers.

-Gan Jiang - Warms the Middle and expels Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Bai Zhu and Ren Shen,for Spleen Yang Deficiency with a cold abdomen, vomiting, and diarrhea. With Fu Ling and Bai Zhu, for Cold-Dampness in the Lower Jiao leading to a sense of heaviness and Cold in the lower back.

-Ze Xie - Promotes urination and leaches out Dampness. With Sha Ren, for scanty urine, abdominal distention and urinary discomfort. With Bai Zhu, for Spleen Deficiency leading to accumulation of Dampness with urinary difficulty, loose stools, diarrhea Milky Lin or vaginal discharge.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Zhu Ling and Ze Xie, for Edema due to Internal Dampness. With Gan Jiang, eliminates Cold Dampness in the Spleen with loss of taste, a sticky sensation in the mouth, nausea, vomiting, diarrhea and a thick,white tongue coat and frequent diarrhea due to Spleen and Stomach Deficiency Cold. With Fu Ling, Zhu Ling and Ze Xie, for edema with Spleen Deficiency. With Gan Jiang, for Deficiency Cold of the Middle Jiao with abdominal pain, distention, vomiting and diarrhea.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and descends Qi. With Qing Pi, for flank pain and chest and abdominal distention due to Liver Qi Stagnation. With Bai Zhu, for anorexia and other symptoms of Damp-Obstruction due to Spleen Deficiency.

-Ren Shen - Powerfully tonifies Yuan Qi, tonifies Spleen, Stomach, Lung and Heart Qi, generates Body Fluids and stops thirst. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Zhu Ling - Promotes urination, leaches out Dampness and dispels Damp-Heat. With Fu Ling, for Lin Syndrome, scanty urine, edema, loose stools, vaginal discharge, jaundice, leg Qi and diarrhea. With Ze Xie, drains Damp, unblocks and drains urinary pathways, and drains Heat from the Bladder. With Fu Ling and Ze Xie, for edema due to Spleen Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Zhu Ling and Ze Xie, strengthens its ability to promote urination and leach out Dampness for dysuria and Phlegm accumulation. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ren Shen and Bai Zhu, for a weak and deficient Spleen with fatigue, anorexia and loose stools. With Mu Xiang, for diarrhea and borborygmus due to Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention.

-Mu Xiang - Promotes the movement of Qi, alleviates pain, adjusts and regulates stagnant Qi in the Intestines, strengthens the Spleen, prevents Stagnation, dispels Damp-Heat and harmonizes the Liver and Spleen. With Sha Ren, for distention, epigastric and abdominal pain, anorexia, nausea, vomiting, diarrhea, dysentery, or tenesmus due to Qi Obstruction and/or Food Stagnation. With Bai Zhu, for anorexia with epigastric and abdominal pain and distention. with Qing Pi, for abdominal pain, distention and belching.
With Sha Ren, Ren Shen and Bai Zhu, for anorexia and abdominal distention and fullness which improves with warmth applied locally.

-Qing Pi - Spreads Liver Qi, breaks up Stagnant Qi, dissipates accumulations, reduces Food Stagnation, dries Dampness and transforms Phlegm.

TREATS

Hangover. Indigestion. Abdominal Cold. Dizziness. Headache. Scleroderma. Gastritis. Alcoholism. Nausea/Vomiting. Reduced appetite. Fatigue. Esophageal reflux. Systemic lupus erythematosis.

* HUO XUE SAN YU TANG #2 - 活血散瘀汤二号 - Quicken the Blood and Scatter Stasis Decoction #2

ACTIONS - Invigorates the Blood. Dispels Stasis. Promotes the circulation of Qi. Alleviates pain

SYNDROMES - Qi and Blood Stagnation

CLINICAL MANIFESTATIONS - Enduring prostatitis that does not heal. Marked, possibly lancinating perineal area pain. Pain radiates to the testes, penis, lower abdomen or low back. Dark circles around the eyes. Possible penile induration. Urinary dribbling. Rough, painful, astringent urination. Painful sexual intercourse. Painful ejaculation. Possible spermatorrhea. Possible hematuria. A hard prostate. Possible nodulation on the prostate. Distension in the chest, epigastrium or abdomen. Distending pain that moves from place to place. Abdominal masses that appear and disappear or. Abdominal masses that do not move. Abdominal distension and pain that is not relieved by a bowel movement. Mood swings. Depression. Frequent sighing. Headache. Irritability. Insomnia. Restlessness. Constipation with small round stools. Dull/dark complexion. Purple lips. Purple nails. Pain that has the quality of boring in, fixed and stabbing and may be worse at night. Bleeding with dark blood and dark clots.

HERBS AND ACTIONS

-Dan Shen - Invigorates the Blood and dispels Blood Stasis.

-Ze Lan - Invigorates the Blood, dispels Blood Stasis, promotes urination and disperses swellings. With Dan Shen, for swelling and pain.

-Chi Shao - Clears Heat, cools the Blood activates Blood and dispels Blood Stasis. With Tao Ren, for Blood Stasis induced menstrual disorders, especially those characterized by early period, excessive bleeding, and thick purple clots. With Mu Dan Pi, for Blood Stasis disorders.

-Tao Ren - Dispels Blood Stasis and invigorates Blood circulation.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and alleviates pain.

-Su Mu - Invigorates Blood circulation and dispels Blood Stasis.

-Mu Dan Pi - Invigorates the Blood, dispels Blood Stasis, clears Heat and cools and harmonizes the Blood.

-Bing Lang - Regulates Qi, reduces accumulations, drains downward and promotes urination.

-Zhi Ke - Promotes the movement of Qi and resolves hardenings.

TREATS

Prostatitis. Spermatorrhea. Hemorrhoids. Constipation.

* LIANG XUE XIAO FENG SAN - 凉血消风散 - Cool the Blood and Eliminate Wind Powder

ACTIONS - Expels Wind. Clears Heat. Cools the Blood. Nourishes Yin and Blood. Eliminates Dampness

SYNDROMES - Wind-Heat with Blood Dryness with Wind-Heat Predominant

CLINICAL MANIFESTATIONS - The lesions have a slightly erythematous base. The scales are dry and powdery. The scales may be very thick on the scalp.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Dang Gui - Tonifies, activates and harmonizes the Blood, reduces swelling, expels pus, generates flesh and alleviates pain.

-Jing Jie - Releases the Exterior, expels Wind, vents rashes and relieves itching. With Dang Gui, for itching and tremors of the hands and feet from Wind due to Blood Deficiency.

-Ku Shen - Clears Heat, dries Dampness, disperses Wind and stops itching. With Chan Tui and Jing JIe, for generalized itching.

-Bai Ji Li - Dispels Wind and stops itching. With Dang Gui, Jing Jie and Chan Tui, for eczema with itching.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin and moistens Dryness.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst and heals eczema, burns and ulcerated sores and wounds. With Zhi Mu, for a high fever from Wind-Heat with irritability and extreme thirst. With Di Huang, for excessive

Fire with injured fluids. With Di Huang and Zhi Mu, for Stomach Fire.

-Gan Cao - Clears Heat, relieves Fire toxicity, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Seborrheic dermatitis.

* Qi XU XUE YU TANG - 气虚血瘀汤 - Qi Deficiency with Blood Stagnation Decoction

ACTIONS - Tonifies Qi. Transforms Stasis. Invigorates the Blood. Unblocks the channels

SYNDROMES - Qi Deficiency Leading to Blood Stagnation

CLINICAL MANIFESTATIONS - Insidious, lingering pain in the chest, flank, epigastric and abdominal areas. Pain worse with exertion. Shortness of breath. Weakness. Possible hemiplegia.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach and relieves numbness and pain.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen and clears Dampness from the Lower Jiao.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and alleviates pain. With Chai Hu and Chi Shao, for Liver Qi and Blood Stagnation generating headaches and/or chest pain.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis. With Tao Ren, invigorates the Blood for all types of Blood Stagnation.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat and cools the Blood. With Tao Ren, for Blood Stasis induced disorders.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Huang Qi, for Qi and Blood Deficiency. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Huang Qi, raises the Clear Yang due to abnormal descent of Qi.

-Pu Huang - Invigorates the Blood, dispels Blood Stasis and stops bleeding by astringing.

TREATS

Chronic hepatitis.

* SHEN FU ZAI ZAO WAN - 人附再造囊 - Ginseng and Aconite Pills for a New Lease on Life

ACTIONS - Supports Yang. Clears the Exterior

SYNDROMES - Yang Deficiency with External Wind-Cold

CLINICAL MANIFESTATIONS - Strong chills or shivering. Possible mild fever. Chronic aversion to Cold. A desire to curl up. Exhaustion. Headaches. General muscle pain. Anhidrosis or. Spontaneous sweating. When there is sweating, the aversion to Cold is more pronounced. Aching in the bones. A low, soft voice. Reluctance to speak. Waxy, pale complexion. Cold body and limbs. There may be an exposure to Wind or Cold prior to the aggravation of the symptoms.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi in Deficiency patients with Exterior conditions. With Huang Qi, for Qi Deficiency with general debility, anorexia and spontaneous sweat.

-Fu Zi - Restores Devastated Yang, rescues from rebellion, warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold and Dampness, warms the channels and stops pain. With Ren Shen, for severe Deficiency of Source Qi and Collapse of Yang with cold extremities, sweating, weak breathing, dizziness and an extremely pale complexion. With Huang Qi, for spontaneous sweating and chills due to Yang Deficiency. With Xi Xin, disperses Cold and stops pain for Cold damage both Internal and External with aversion to Cold, headache and generalized body aches with aching joints.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, unblocks Yang and transforms Qi. With Bai Shao, for External Wind-Cold with disharmony between the Ying and Wei, with spontaneous sweating, fever and chills. With Fu Zi, for chills and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi. With Chuan Xiong, expels Wind-Dampness, warms the channels and collaterals, facilitates joint movement and relieves the discomfort of painful obstruction.

-Huang Qi - Tonifies Qi and Blood, tonifies Wei Qi, stabilizes the Exterior, tonifies the Lungs and relieves numbness and pain. With Gui Zhi, for Qi and Blood Deficiency and Ying and Wei Deficiency with numbness and painful obstruction of the musculature. With Fu Zi and Sheng Jiang, for profuse perspiration and extreme fatigue due to Yang Deficiency.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Xi Xin and Fang Feng, for Wind-Cold headaches.

-Fang Feng - Releases the Exterior and expels External Wind. With Huang Qi, prevents Wind from entering the skin.

-Qiang Huo - Releases the Exterior and disperses Cold. With Chuan Xiong, for headaches and generalized body aches and pains associated with the common cold or painful obstruction. With Fang Feng, for pain due to External Wind-Dampness.

-Xi Xin - Disperses Wind-Cold and Internal Cold and alleviates pain. With Chuan Xiong, for Shao Yin Cold headaches. With Qiang Huo, Fang Feng and Gui Zhi, for Wind-Cold-Damp Bi pain. With Qiang Huo, Fang Feng and Chuan Xiong, for Wind-Cold.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei. With Huang Qi and Ren Shen, restrains sweating from Deficiency. With Gui Zhi, Sheng Jiang and Da Zao, for Wind-Cold with Deficiency and perspiration.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Middle, adjusts the Ying and Wei, stops vomiting and reduces the toxicity of other herbs. With Da Zao, for External Wind-Cold. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis. With Gui Zhi and Da Zao, harmonizes the Ying and Wei to drive out pathogens.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi and moderates and harmonizes the harsh properties of other herbs.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Common cold in the elderly. Spontaneous perspiration.

* TUO LI XIAO DU YIN - 托裡消毒飲 - Drain the Interior and Detoxify Decoction

ACTIONS - Strengthens the Spleen. Tonifies Qi and Blood. Eliminates Dampness. Expels pus. Draws out toxicity. Promotes the generation of flesh

SYNDROMES - Spleen Deficiency with Accumulation of Pathogenic Dampness. Toxic sores in deficient patients

CLINICAL MANIFESTATIONS - Intermittent discharge of pus. The sores either do not suppurate or only leak pus slowly and fail to heal. Viscous, thin fluid. Mental and physical fatigue. Lassitude. Lack of luster. Poor appetite. Loose stools. Fever.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy because it contains Sp. Gleditsiae Zao Jiao Ci.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi and strengthens the Spleen and Stomach. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Gan Cao and Fu Ling for Spleen and Stomach Deficiency with diarrhea, abdominal distention and fatigue.

-Bai Zhu - Tonifies Qi, strengthens the Spleen and dries Dampness. With Huang Qi for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Gan Cao - Tonifies Qi, strengthens the Spleen, clears Heat, relieves Fire toxicity and harmonizes. With Bai Zhi for pain associated with ulcers. With Jie Geng, for pain and swelling of the throat. With Jin Yin Hua, for damp rashes or acne.

-Dang Gui - Nourishes Blood, reduces swelling, expels pus and generates flesh. With Huang Qi for ulcerated abscesses with insufficient drainage or draining only a clear thin discharge. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.With Jin Yin Hua, reduces obstruction and toxicity for swollen, painful sores and necrosis of surrounding tissue.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With Dang Gui, Huang Qi and Zao Jiao Ci, for chronic non-healing sores with or without pus in deficient patients.

-Bai Shao - Nourishes Blood and preserves Yin. With Dang Gui, nourishes Yin and Blood. With Ren Shen and Huang Qi, restrains sweating from Deficiency.

-Jin Yin Hua - Clears Heat and relieves Fire toxicity. With Zao Jiao Ci, for the initial stage of abscesses and boils. With Gan Cao, for Toxic swelling and sores.

-Bai Zhi - Reduces swelling, expels pus, expels Dampness and alleviates discharge. With Jie Geng and Bai Zhi, for ulcerated boils where pus is not discharged. With Gan Cao for pain associated with ulcers. With Jin Yin Hua and Dang Gui, for early-stage

sores and carbuncles.

-Jie Geng - Resolves Phlegm, promotes discharge of pus, aids suppuration and directs formula to the upper body. With Bai Zhi for ulcerated boils where pus is not discharged. With Gan Cao disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat.

-Huang Qi - Tonifies Qi and Blood, nourishes the muscles, tonifies the Spleen, promotes the discharge of pus and generates flesh. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Dang Gui, for ulcerated abscesses with insufficient drainage or draining only a clear thin discharge. With Ren Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweat.

-Zao Jiao Ci - Dispels Phlegm, dissipates Stagnation, reduces swelling and aids suppuration. With Bai Zhi, for difficulty discharging pus from abscesses.

-Fu Ling - Tonifies Qi, strengthens the Spleen and transforms Phlegm. With Ren Shen and Bai Zhu, for weak and deficient Spleen with fatigue, anorexia and loose stools.

TREATS

Chronic purulent otitis media. Suppurative lymphadenitis. Carbuncles. Gangrene. Otorrhea. Boils. Mastitis. Cellulitis. Herpes simplex. Gingivitis. Abscesses. Inflamed cysts. Bed sores. Otitis media. Conjunctivitis. Genital eruptions. Hordeolum. Diverticulitis. Herpes zoster. Periodontitis.

* WEN DAN TANG - 温胆汤 - Warm Gallbladder Decoction

ACTIONS - Regulates Qi. Transforms Phlegm. Clears the Gallbladder. Harmonizes the Stomach. Dries Dampness. Dispels Heat

SYNDROMES - Phlegm-Fire Disturbs the Heart. Gallbladder Deficiency Heat. Disharmony Between the Gallbladder and Stomach with Phlegm Heat. Qi Stage Gallbladder Damp-Heat

CLINICAL MANIFESTATIONS - Dizziness. Vertigo. Nausea and vomiting. Insomnia. Dream-disturbed sleep with unusual dreams. Palpitations. Anxiety. Profuse white foamy sputum. Restlessness. Timidity. Indecisiveness. Indeterminate gnawing hunger. Seizures accompanied by copious sputum. Flushing up. Chest distention. Expectoration of yellow Phlegm. Bitter taste in the mouth. Chills and fever. Abdominal distention. Frequent dark, scanty urine. Irritability. Depression. Slight thirst. Anorexia after serious illness.

HERBS AND ACTIONS

-Zhu Ru - Clears Heat and Phlegm from the Gallbladder and Stomach, cools Blood and descends rebellious Qi. With Ban Xia and Zhi Shi, for insomnia, palpitations and irritability due to Phlegm Heat leading to disharmony between the Gallbladder and Stomach with a stifling sensation in the chest and restlessness. With Zhi Shi, for Phlegm-Heat obstructing the flow of Qi with focal distention in the chest and epigastrium, hiccup, dry retching, nausea and acid regurgitation and palpitations, irritability, insomnia and emotional problems due to Gallbladder constraint with Phlegm Disturbing the Heart. With Ban Xia, Chen Pi, Zhi Shi and Fu Ling, for Gallbladder Fire with Phlegm.

-Zhi Shi - Reduces accumulation, descends Qi, transforms Phlegm and reduces distention. With Chen Pi, strengthens the Middle Jiao.

-Ban Xia - Transforms Phlegm, descends rebellious. Qi, harmonizes the Stomach and stops vomiting. With Chen Pi, for Spleen and Stomach Qi Disharmony with epigastric and abdominal distention or pain. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools, treats Phlegm, thin mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia.

-Chen Pi - Regulates Qi, tonifies the Spleen, transforms Phlegm and descends Qi. With Ban Xia, for excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Sheng Jiang, for manifestations of Stomach Qi Disharmony and Cold-Dampness Obstructing the Middle with nausea and hiccup. With Ban Xia, Zhu Ru and Sheng Jiang, for nausea and vomiting due to rebellious Stomach Qi.

-Fu Ling - Resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Gan Cao, strengthens the Spleen, drains Dampness, harmonizes the Middle Jiao and calms the Shen. With Chen Pi, for nausea and vomiting due to congested Fluids. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention, and anorexia due to congested fluids. With Ban Xia, Chen Pi and Sheng Jiang, for congested fluids in the Stomach causing nausea and vomiting.

-Gan Cao - Resolves Phlegm, clears Heat, tonifies the Spleen and harmonizes and moderates the harsh properties of the other herbs.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, protects the Stomach and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen.

-Sheng Jiang - Regulates the relationship between the Gallbladder and the Stomach and assists in stopping vomiting. With Da Zao, protects the Stomach Qi. With Ban Xia, for vomiting due to Cold, Thin Mucus. With Zhu Ru, for vomiting due to Heat in patients with Stomach Qi Deficiency. With Chen Pi, for Cold-Dampness Obstructing the Middle with nausea and hiccup.

TREATS

Chronic gastritis. Peptic ulcer. Chronic hepatitis. Neurosis. Early stages of schizophrenia. Psychosis. Meniere's disease. Chronic bronchitis. Hypertension. Myocarditis. Pericarditis. Morning sickness. Menopause syndrome. Depression. Stroke. Male menopause. Epilepsy. Nephropathy. Diabetic foot. Organophosphorus poisoning. Vegetative nervous dysfunction with palpitations. Cardiac arrhythmia. Anxiety. Glaucoma. Irritable bowel syndrome. Dysentery. Dizziness. Vaginal discharge. Polyuria. Nausea/Vomiting. Amyotrophic lateral sclerosis (ALS). Anxiety neurosis. Reactive psychosis. Obsessive compulsive disorder. Migraine. Schizophrenia. Impotence. Otitis externa. Acid reflux. Anorexia. Post-stroke paralysis. Otorrhea. Labyrinths. Gastroptosis. Hysteria. Side effects of chemotherapy. Bi-polar disorder. Acute or chronic tracheitis. Pulmonary emphysema. COPD. Asthma. Timidity. Angina. Premature atrial contractions. Cholecystitis. Severe insomnia. Autonomic dystonia. Alopecia. Tinnitus. Deafness. Melancholia. Diabetes mellitus. Diabetic retinopathy. Pneumonia. Hyperthyroidism with insomnia. Vestibular neuritis with dizziness. Palpitations. Insomnia. Coronary Heart Disease. Gastralgia. Vertigo. Oliguria. AIDS/HIV. Fever. Neurasthenia. Insanity. Involutional psychosis. Senile dementia. Neurosis. Abdominal fullness and distention. Deafness. Otitis media. Chronic pancreatitis. Indigestion. Ear pain.

1.3.3.27 RT-TCM-27

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_27

Ba Zheng San, Ke Yin Fang, Qing Hua Tang, Raynaud's #2, Ren Re San, Tai Yuan Yin, Teng Long Tang, Wu Ling San, Yin Chen Hao Tang

Recordings Updated in June 2025

* BA ZHENG SAN - 八正散 - Eight Herb Powder For Rectification. Dianthus Formula. Powder of Eight Ingredients. Powder for Dispersing Heat and Promoting Urination

ACTIONS - Clears Heat. Purges Fire. Promotes urination. Unblocks painful urinary dysfunction

SYNDROMES - Bladder Damp-Heat. Stone Lin. Blood Lin. Heat in Heart Channel Transferring to the Small Intestine Channel

CLINICAL MANIFESTATIONS - Dark, turbid, scanty, difficult urination or. Frequent, urgent and painful. Urination may be red. Maybe fever. Sores in mouth, on tongue or throat. Dry mouth and throat. Maybe urinary retention (severe). Maybe lower abdominal distention and pain (severe). Thirst. Maybe total obstruction. Parched throat. Severe sore throat. Maybe anuria (severe). Dribbling urination. May be profuse whitish, yellow vaginal discharge. Maybe be urinary calculi. Constipation. Eye redness and pain. Epistaxis. Distending lower back pain. Irritability. Scorched lips.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with chronic Lin Syndrome. Contraindicated during pregnancy. Long term use may produce weakness, palpitations, light headedness and loss of appetite. Contraindicated for those with chronic disease with weakness.. Contraindicated for those with Deficiency Cold.

HERBS AND ACTIONS

-Mu Tong - Promotes urination, unblocks painful urinary dysfunction, clears Damp obstruction and drains Heart Heat through the Small Intestine. With Hua Shi, Che Qian Zi and Zhi Zi, for painful urinary dribbling due to Damp-Heat in the Bladder. With Che Qian Zi, for Heart Fire Transferring to the Small Intestine channel causing edema and painful urinary dysfunction.

-Hua Shi - Drains Heat from the Bladder, aids expulsion of stones, expels Damp-Heat and stops bleeding due to Heat. With Mu Tong, for Heat Lin. With Zhi Zi and Mu Tong, for Lin Syndrome with hot, painful urinary dribbling and scanty, dark, painful urination. With Che Qian Zi, Qu Mai and Bian Xu, clears Damp-Heat by promoting urination. With Mu Tong, Che Qian Zi and Zhi Zi, for Damp-Heat dysuria with pain and cloudy urine.

-Che Qian Zi - Promotes urination and clears Heat. With Mu Tong and Hua Shi, for Lin Syndrome.

-Qu Mai - Promotes urination, drains Damp-Heat from the Bladder and unblocks painful urinary dysfunction. With Hua Shi and Mu Tong, for Lin Syndrome. With Zhi Zi, for Lower Jiao Damp-Heat with burning, painful, dribbling urination. With Che Qian Zi and Hua Shi, for Heat dysuria (Re Lin) with burning and pain during urination.

-Bian Xu - Promotes urination, drains Damp-Heat from the Bladder and eliminates painful urination. With Qu Mai and Che Qian Zi, for Damp-Heat in Lower Jiao or Stone Lin with urinary discomfort. With Qu Mai, for painful urinary dysfunction. With Mu Tong, Che Qian Zi, Zhi Zi and Hua Shi, for Damp-Heat dysuria (Shi-Re Lin).

-Zhi Zi - Drains Heat from the three Jiaos through the urine and stops bleeding. With Hua Shi, for painful urinary dysfunction due to Damp-Heat in the Bladder. With Hua Shi, Bian Xu and Che Qian Zi, for urinary tract infection.

-Da Huang - Drains Damp-Heat and clears Heat through the stool. With Che Qian Zi

and Bian Xu, for hot, painful urinary dysfunction. With Che Qian Zi, Mu Tong and Zhi Zi, for hot, painful urinary dysfunction. With Zhi Zi, for constipation.

-Deng Xin Cao - Promotes urination, leaches out Dampness, unblocks painful urinary dysfunction, clears Heat from the Heart channel by directing Fire downward and calms the Spirit. With Hua Shi, for Damp-Heat in the Heart, Lung and Bladder channels causing incomplete, painful urination. With Mu Tong, for difficult, scanty and burning associated with Heart channel Heat shifting to the Large Intestine or Heat clumping in the Bladder or Damp-Heat lodging in the Lower Jiao.

-Gan Cao - Harmonizes, relieves abdominal pain, clears Heat and relieves Fire toxicity. With Hua Shi, relieves irritability.

TREATS

Acute glomerulonephritis. Cystitis. Interstitial cystitis. Urethritis. Urolithiasis. Acute prostatitis. Stomatitis. Acute urinary tract infections. Pyelonephritis. Uroschesis. Gout. Headache. Pterygium. Kidney failure. Oliguria. Fever. Post-surgical urinary retention. Low back pain. Edema during pregnancy. Enuresis. Strangury. Postpartum convulsions. Cervical cancer. Red eyes. Sore throat. Female Bladder infections. Metrorrhagia. Male gonorrhea. Acute pyelonephritis. Leukorrhagia. Pyelitis. Prostate cancer. Dysuria. Nephritis. Benign prostatic hypertrophy. Epistaxis. Vaginal discharge. Polyuria. Hematuria. Constipation. Chronic hepatitis. Herpes genitalia. Edema. Hernia. Spermatorrhea. Chyluria. Urinary incontinence. Eye pain. Vaginitis. Stranguria associated with AIDS/HIV.

* KE YIN FANG - 咳银方 - Overcome Psoriasis Formula

ACTIONS - Nourishes Blood. Dispels Wind. Moistens Dryness

SYNDROMES - Blood Dryness induced psoriasis

CLINICAL MANIFESTATIONS - Small coin sized moist pale red maculae located on the scalp, body, extremities, and other areas. There is a tightly covered scale. Removing the scale reveals a light pink shining membrane. Beneath the membrane are petechiae. Progress of disease is slow. New lesions appear sporadically. Chronic patients may see it in any season. The lesions heal without scarring. There may be nail involvement with stippling or pitting of the nail plate. Rarely presents as diffuse redness of the skin covered by fine scales. Light-headedness. Pallor.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Xuan Shen - Clears Heat, cools the Blood and nourishes Yin.

-Huo Ma Ren - Nourishes and moistens the Intestines, nourishes Yin and clears Heat.

-Bei Dou Gen - Clears Heat, Resolves toxicity, reduces swelling and resolves Dampness.

-Ku Shen - Clears Heat, dries Dampness and stops itching.

TREATS

Psoriasis due to Blood Dryness.

* QING HUA TANG - 青化汤 - Clear And Transform Decoction

ACTIONS - Nourishes Yin. Clears Damp-Heat. Invigorates the Blood. Breaks up Stasis

SYNDROMES - Yin Deficiency with Damp-Heat and Blood Stagnation

CLINICAL MANIFESTATIONS - Weak low back and limbs. Dizziness. Tinnitus. Tidal fevers. Night sweats. Nocturnal emissions. Steaming bone disorder. Afternoon fevers. Spermatorrhea. Foul smelling diarrhea or dysenteric disorder. Red, swollen, painful knees, legs or feet. Rib and hypochondriac pain. Edema. Painful urinary dysfunction. Fixed abdominal masses. Fixed pain.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin.

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao and drains Kidney Fire. With Che Qian Zi, for burning, painful, hesitant urination.

-Dan Shen - Invigorates the Blood and dispels Blood Stasis.

-Che Qian Zi - Promotes urination and clears Damp-Heat.

-Bei Xie (Fen) - Resolves turbid Dampness in the Lower Jiao.

-Yi Zhi - Warms the Kidneys and astringes Jing and urine.

-Da Huang - Drains Heat, purges accumulations, clears Heat, transforms Dampness, promotes urination, invigorates the Blood and dispels Blood Stasis. With Sheng Di Huang, for Deficiency Fire.

TREATS

Chronic prostatitis. Nocturnal emissions. Spermatorrhea.

* RAYNAUD'S #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Invigorates the Blood. Breaks up Stagnation

SYNDROMES - Qi and Blood Stagnation

CLINICAL MANIFESTATIONS - Pain that is fixed, stabbing and/or severe or. Pains that move around. Distention. Depression. Irritability. Pain is worse with pressure. Dark complexion. Fixed, palpable masses. Bleeding with clots. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas. Varicose and spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots

HERBS AND ACTIONS

-Ji Xue Teng - Invigorates and tonifies the Blood, activates the channels and relaxes the sinews.

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain. With Dang Gui, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesia. With Gui Zhi, for Qi and Blood Deficiency and Ying and Wei Deficiency with numbness and painful obstruction of the musculature.

-Bai Shao - Nourishes the Blood and relieves pain.

-Yu Jin - Invigorates the Blood, dispels Blood Stasis, regulates Qi flow, speeds healing of chronic sores and alleviates pain. With Chai Hu, for Liver Qi and Blood Stagnation with flank pain and distention, dysmenorrhea and irregular menstruation.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals to relieve pain and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels.

-Chai Hu - Spreads Liver Qi and relieves Stagnation. With Bai Shao, for Liver Blood Deficiency with Liver Qi Stagnation.

-Dang Gui - Invigorates and harmonizes the Blood and disperses Cold. With Bai Shao, regulates and harmonizes Qi and Blood.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis and relieves pain. With Bai Shao, for spasms and cramping pain associated with Blood Deficiency and Blood

Stagnation.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen. With Bai Shao, Chai Hu and Dang Gui, for hypochondriac pain due to Liver Qi Stagnation.

-Xi Xin - Disperses Wind-Cold and Internal Cold and alleviates pain.

TREATS

Raynaud's disease.

* REN RE SAN

ACTIONS - Augments Qi. Restores the Pulse. Calms the Shen. Supports Yang. Nourishes Jing

SYNDROMES - Heart and Gallbladder Qi Deficiency

CLINICAL MANIFESTATIONS - Impotence. Inability to get or maintain an erection. Spermatorrhea. Premature ejaculation. Fear of sexual intercourse. Palpitations. Anxiety. Apprehension. Constant worry. Poor concentration. Timidity. Shyness. Easily startled. Nervousness. Irritability. Restless sleep. Insomnia. Dizziness. Emaciation. Shortness of breath. Constipation. Dry mouth and throat. Numbness. Dry cough. Cough with little or no sputum. Cough with blood streaked sputum. Spontaneous perspiration. Night sweats. Five Sole Heat due to stress. Early menses. Restlessness. Dry tongue. Pale copious menstrual flow. Weakness. Memory loss. Excess dreams. Fright. Physical and mental fatigue. Dry, hard stool. Coarse skin. Dry throat. Weakness. A skinny appearance.
A pale complexion.

HERBS AND ACTIONS

-Bai Zi Ren - Nourishes the Heart and calms the Spirit.

-Shu Di Huang - Nourishes Jing and Blood, fills the Marrow and nourishes Liver and Kidney Yin.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin, benefits Jing and brightens the eyes. With Shu Di Huang, for Liver and Kidney Deficiency. With Ju Hua, for Liver and Kidney Deficiency with Jing and Blood unable to rise and nourish the eyes with tinnitus, headache, and visual impairment.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Wu Wei Zi, for spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiency of the Liver and Kidneys. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Wu Wei Zi - Quiets the Spirit, calms and contains Heart Qi, tonifies the Kidneys, astringes Jing and stops diarrhea and spermatorrhea.

-Ren Shen - Tonifies Heart Qi, calms the Spirit and treats impotence.

-Fu Ling - Strengthens the Spleen, quiets the Heart, calms the Spirit and soothes the nerves.

-Ju Hua - Promotes the movement of Heart Qi and Blood and stimulates Blood circulation.

-Zhi Ke - Promotes the movement of Qi and reduces distention and pressure.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens Yang and Ming Men Fire and assists in the generation of Qi and Blood.

TREATS

Impotence. Spermatorrhea.

* TAI YUAN YIN - 胎原饮 - Fetus Original Qi Decoction

ACTIONS - Tonifies Qi and Blood. Calms the fetus

SYNDROMES - Qi and Blood Deficiencies threatening miscarriage during the first trimester of pregnancy

CLINICAL MANIFESTATIONS - Threatened miscarriage during the first trimester of pregnancy or. Miscarriage after several months or premature delivery. Lassitude. Dizziness. Blurred vision. Palpitations. Insomnia. Anorexia. Loose stools. Tiredness. Weariness. Pale complexion. Weak limbs. Abdominal distention. Lumbar soreness. Frequent, clear urine. Clear, watery vaginal discharge. Scanty vaginal bleeding. Pale dilute blood.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi, calms the Spirit and prevents downward movement of the fetus. With Shu Di Huang, for severe Qi and Blood Deficiencies due to loss of Blood. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, regulates the menses, disperses Cold and stops pain due to Blood Stasis. With Huang Qi, for Qi and Blood Deficiencies and pallor, debility, fatigue and/or low grade fever due to excessive blood loss. With Bai Shao, Regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Gan Cao, moderates spasms and relieves abdominal pain. With Ren Shen, Bai Zhu, Bai Shao and Shu Di Huan, for general menstrual disorders with fatigue and weakness due to Qi and Blood Deficiencies.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Bai Shao - Nourishes the Blood and regulates menstruation. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach. With Dang Gui, nourishes Yin and Blood.

-Bai Zhu - Tonifies the Spleen, augments Qi and calms the fetus. With Shu Di Huang , Dang Gui and Bai Shao, for unstable pregnancy with Blood Deficiency.

-Chen Pi - Regulates Qi, adjusts the Middle and helps prevent Stagnation from tonic herbs. With Bai Zhu, for anorexia and other symptoms of Damp-Obstruction due to Spleen Deficiency.

-Du Zhong - Tonifies the Kidneys and Liver, aids the smooth flow of Qi and Blood and calms the fetus.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs. With Ren Shen, relieves palpitations and anxiety.

TREATS

Habitual miscarriage.

* TENG LONG TANG - 腾龙汤 - Soaring Dragon Decoction - Moutan And Persica Combination

ACTIONS - Disperses Blood Stagnation. Activates the Blood. Removes suppuration. Clears Damp-Heat

SYNDROMES - Damp-Heat with Blood Stagnation in the Lower Jiao. Heat and Blood Stasis in the genital area

CLINICAL MANIFESTATIONS - Abdominal distention. Dry, scaly skin. Tightness. A mass-like appearance. Softness on palpation. Absence of thirst. Maybe an aversion to drinks. Tenderness and soreness of the lower abdomen. No fever. Constipation. Condition fails to improve. A right-sided abdominal swelling that is soft when touched and not very painful. Cold extremities. A gray or pale complexion.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy. Contraindicated for those with diarrhea.

HERBS AND ACTIONS

-Yi Yi Ren - Strengthens the Spleen, resolves Dampness, clears Heat, expels pus and clears Damp-Heat. With Dong Gua Zi, for scanty urine and edema due Damp Obstruction. With Dong Gua Zi and Tao Ren, for Lung abscess.

-Dong Gua Zi (Ren) - Clears Heat, expels Phlegm, expels pus, moistens the Lungs and drains Dampness. With Da Huang and Mu Dan Pi, for Intestinal abscess. With Yi Yi Ren, for Lung or Large Intestinal abscess that has formed pus.

-Mang Xiao - Purges accumulations, guides out Stagnation, softens hardness, moistens Dryness, clears Heat, drains Fire and reduces swelling. With Da Huang, for constipation due to Heat in the Stomach and Intestines. With Da Huang and Gan Cao, for moderate constipation due to accumulation of Excess Heat.

-Mu Dan Pi - Clears Heat, cools and harmonizes the Blood, invigorates the Blood, dispels Blood Stasis, drains pus and reduces swelling. With Da Huang, Dong Gua Zi and Tao Ren, for abdominal pain, constipation, and low grade fever associated with unsuppurated abdominal abscess.

-Tao Ren - Breaks up Blood Stasis, invigorates Blood circulation, moistens the Intestines, unblocks the bowels and drains abscesses. With Da Huang, for severe abdominal infection.

-Cang Zhu - Strongly dries Dampness, tonifies the Spleen and clears Dampness from the Lower Jiao.

-Da Huang - Drains Heat, purges accumulations, drains Fire, transforms Dampness, promotes urination,invigorates the Blood, dispels Blood Stasis and reduces Fire toxicity. With Mu Dan Pi, Tao Ren and Mang Xiao, for Intestinal abscess. With Mang Xiao, for abscess, swellings and toxic sores.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Genital warts. Periproctitis. Endometritis. Hemorrhoidal pain. Orchitis. Prostatitis.

Abdominal fullness and distention. Benign prostatic hypertrophy. Peritonitis. Uterine fibroids. Uterine cancer (initial stage). Intestinal abscess. Epididymitis. Constipation.

* WU LING SAN - 五苓散 - Five Ingredient Formula With Poria - Hoelen Five Herb Formula

ACTIONS - Promotes urination. Drains Dampness. Strengthens the Spleen. Disperses water accumulation. Warms the Yang. Promotes the transforming functions of Qi

SYNDROMES - Tai Yang Biao Fu. Spleen Deficiency Edema. Lower Jiao Retention of Water (Yi Yin or Zhi Yin). Tan Yin

CLINICAL MANIFESTATIONS - Headache. Fever (maybe chills). Strong thirst with a desire to drink. Vomits immediately after drinking. Urinary difficulty. Edema. General sensation of heaviness. Diarrhea. Irritability. Simultaneous vomiting and diarrhea. Throbbing sensations below umbilicus. Vomits frothy saliva. Vertigo. Loose stools. Shortness of breath. Cough. Urinary retention. Lower abdominal fullness. Extreme thirst. Palpitations. Lower abdominal distention. Lower abdominal palpitations. Dizziness. Abdominal pain.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - With Spleen Qi and Kidney Deficiency limit dosage, may combine with tonics. For urinary difficulty with Yin Deficiency, protect Yin. Overdose symptoms include - dizziness, vertigo, a bland taste and anorexia. Avoid long term administration. Contraindicated for those with depleted body fluids from profuse perspiration. Contraindicated for those with excessive vomiting. Contraindicated for those with excessive diarrhea. Contraindicated for those with Damp-Heat Accumulation.
This formula can be beneficial in relieving adverse gastrointestinal events such as nausea and dyspepsia associated with the use of selective serotonin re uptake inhibitors (SSRIs).

HERBS AND ACTIONS

-Ze Xie - Promotes urination, resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm.

-Fu Ling - Leeches out Dampness due to deficiency, promotes urination, strengthens the Spleen, and assists the Yang. With Zhu Ling, promotes urination. With Bai Zhu, strengthens the Spleen and promotes urination. With Gui Zhi warms and transforms fluids, unblocks Yang and promotes urination. With Ze Xie, Gui Zhi and Bai Zhu for Dampness Obstruction causing Lin Syndrome, edema, heaviness of the body, and irritability.

-Zhu Ling - Promotes urination, leaches out Dampness and dispels Heat. With Ze Xie, drains Damp, unblocks and drains urinary pathways and drains Heat from the Bladder.

-Bai Zhu - Strengthens the Spleen, aids transformation and transportation of fluids and resolves Dampness. With Fu Ling and Gui Zhi, for Spleen Deficiency with chest distention and edema.

-Gui Zhi - Warms the Ming Men assisting the Bladder in transforming and discharging urine, aids the Spleen to raise up Damp and releases exterior pathogens. With Bai Zhu, for Heart and Spleen Yang Deficiency with palpitations, edema and shortness of breath.

TREATS

Acute or chronic nephritis. Glomerulonephritis. Pyelonephritis. Nephrotic syndrome. Chronic renal failure. Congestive Heart failure. Ascites from cirrhosis of the Liver. Meniere's disease. Chronic hepatitis. Viral hepatitis. Gastroptosis. Gastrectasis. Acute gastroenteritis. Acute enteritis with diarrhea. Genitourinary infections. Neurogenic bladder syndrome. Scrotal hydrocele. Cardiac edema. Varicella. Cholera. Blisters. Urolithiasis. Urinary tract infection. Benign prostatic hypertrophy. Infantile indigestion. Pericardial and pleural effusions. Central serous retinopathy. Catarrhal conjunctivitis. Aphthous ulcers. Flat warts. Eczema. Vomiting and diarrhea due to a common cold. Diabetes. Obesity. Headache. Common cold. Dizziness. Vaginal discharge. Asthma. COPD. Fever. Lupus erythematosus. Abdominal pain. Bronchitis. Anorexia. Edema. Chronic hepatitis. Hernia. Dyspnea. Hypertension during pregnancy. Dacrystitis. Migraine. Uremia. Toxemia during pregnancy. Indigestion. Seasickness. Trigeminal neuralgia. Viral conjunctivitis. Nyctalopia. Otitis media. Nephropyelitis. Cyclic vomiting. Pseudocholera. Cold-type urticaria. Scrotal edema. Gestational hypertension. Cirrhosis of the Liver. Hydrocephalus. Early-stage renal insufficiency. Cystitis. Headache from increased cranial pressure. Motion sickness. Polyhydramnios. Glaucoma. Allergic rhinitis. Diffuse polyps of the vocal cords. Urticaria. Alopecia. Herpes zoster. Gastric relaxation. Hypersalivation. Recurrent headache. Hydrocele. Prostatitis. Influenza. Cough. Vertigo. Oliguria. Emphysema. Multiple sclerosis. Cholecystitis. Diarrhea. Pneumonia. Hypertension. Intestinal tuberculosis. Gastritis. Impotence. Palpitations. Edema during pregnancy. Low back pain. Coronary Heart disease.

* YIN CHEN HAO TANG - 茵陳蒿湯 - Artemisia Scopariae Decoction. Capillaris Combination. Decoction of Capillaris

ACTIONS - Clears Heat. Resolves Dampness. Reduces jaundice

SYNDROMES - Damp-Heat in the Liver and Gallbladder (Yang Jaundice)

CLINICAL MANIFESTATIONS - Whole body jaundice (tangerine color). Slight abdominal distention. Urinary difficulty. Thirst (only wants to sip). Perspiration on the head. Scanty, dark urination. Upper abdominal distention. Maybe grayish pale stools. Nausea / vomiting. Yellow sclera. Edema. Chest discomfort. Constipation. Maybe mania.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin jaundice. Use Da Huang with extreme caution during pregnancy.

HERBS AND ACTIONS

-Yin Chen - Clears Damp-Heat from Liver and Gallbladder and treats all types of jaundice, especially Damp-Heat jaundice. With Zhi Zi strongly relieves Damp-Heat jaundice. With Yin Chen Hao and Zhi Zi, for Damp-Heat jaundice with abdominal distention, fever, constipation, and urinary dysfunction and gallstones.

-Zhi Zi - Clears Heat from the three Jiaos through the urine, drains Damp-Heat and activates the Blood. With Da Huang and Yin Chen Hao, for jaundice due to Damp-Heat in the Liver and Gallbladder.

-Da Huang - Purges Heat, benefits the Gallbladder, activates blood flow through the Liver, strengthens other herbs actions and assists Yin Chen Hao. With Yin Chen Hao, for early-Stage Damp-Heat jaundice when Heat is stronger than Dampness.

TREATS

Acute infectious hepatitis. Chronic active hepatitis. Viral hepatitis. Hepatic necrosis. Cirrhosis of the Liver. Cholelithiasis. Cholecystitis. Malaria. Typhoid fever. Acute leukemia. Leptospirosis. Urticaria. Acne. Oliguria. Jaundice. Biliary atresia. Seborrheic dermatitis. AIDS/HIV. Nausea. Constipation. Acute pancreatitis. Wei Syndrome. Hernia. Herpes simplex. Eye pain. Liver cancer. Pruritis. Eye pain. Beriberi. Nephritis. Stomatitis. Gingivitis. Ophthalmic disorders. Uterine bleeding. Indigestion. Hepatitis A. Hepatitis C. Vaginal discharge. Eczema. Hematuria. Hyperlipidemia. Neonatal jaundice. Vomiting. Hemolytic anemia. Abdominal fullness and distention. Anorexia. Edema. Herpes zoster. Perspiration.

1.3.3.28 RT-TCM-28

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_28

Celiac #1, Gao Tie Fa, Gynecomastia #1, Impotence #1, Infertility #1, Menstruation-Regulating Formula, Metabolic Syndrome #1, Xiao Ke Fang, Zuo Gui Wan

Recordings Updated in June 2025

* CELIAC #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Nourishes Yin. Clears Heat. Eliminates Dampness. Stops diarrhea

SYNDROMES - Qi and Yin Deficiency with Damp-Heat

CLINICAL MANIFESTATIONS - Enduring diarrhea or loose stools. Fatigue. Lack of Strength. Emaciation. Numbness and tingling. A pale face. Malar flushing. Cold extremities. Five Sole Heat. Dizziness. Tinnitus. Palpitations. Insomnia. Night sweats. A dry mouth and throat. Mouth and/or tongue sores. Scanty menstruation. Delayed menstruation. Amenorrhea.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Mai Dong - Nourishes Stomach Yin and generates Fluids. With Ren Shen and Wu Wei Zi, for profuse sweating, wheezing, increased Heart rate and exhaustion due to severe Deficiency of the Heart and Lungs. With Di Huang, for hematemesis or epistaxis due to Yin Deficiency with Excess Heat.

-Wu Wei Zi - Tonifies Qi, astringes Jing and stops diarrhea. With Ren Shen and Mai Dong, for exhaustion of Qi and Yin with shortness of breath, coughing and thirst and spontaneous nightsweats with Qi Deficiency.

-Tian Hua Fen - Drains Heat and generates Fluids. With Mai Dong, Zhi Mu and Wu Wei Zi, for Heat and Dryness in the Lungs and Stomach.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao.

-Ge Gen - Raises Spleen Yang and stops diarrhea. With Shan Yao, for diarrhea due to Spleen and Stomach Qi Deficiency.

-Shan Yao - Tonifies the Spleen, nourishes Stomach Yin and stops diarrhea.

-Bai Bian Dou - Clears Summerheat, resolves Dampness and strengthens the Spleen.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin, moistens Dryness, generates Fluids and clears Deficiency Fire. With Tian Hua Fen and Mai Men Dong, for thirst and irritability due to Lung and Stomach Dryness.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Ren Shen, relieves palpitations and anxiety.

-Ren Shen - Tonifies Spleen and Stomach Qi. With Mai Dong and Wu Wei Zi, for Qi and Yin Deficiency with shortness of breath and spontaneous sweat usually secondary to injury from Heat.

-Zhi Ke - Promotes the movement of Qi and reduces distention and pressure.

TREATS

Celiac disease.

* GAO TIE FA - 膏贴泼 - Cleansing Paste (Topical)

ACTIONS - Purges Fire. Relieves toxicity. Dries Dampness. Moves Qi. Invigorates the Blood. Stops bleeding. Discharges pus. Generates flesh

SYNDROMES - Topically for Toxic Heat with Blood Stagnation

CLINICAL MANIFESTATIONS - Tumor develops quickly. Fluid inside the breast with a lump inside it. Long-standing illness. Pain. Redness. Ulceration. Discharge of yellow or bloody, foul-smelling fluid. Fatigue. Fever. Anxiety. Dry mouth. Thirst. Dark urine. Bitter taste. Red eyes. Insomnia.

HERBS AND ACTIONS

-Mu Xiang - Promotes the movement of Qi, dispels Damp-Heat and alleviates pain.

-Di Huang - Clears Heat and cools the Blood.

-Song Xiang - Dries Dampness, dispels Wind, discharges pus, removes toxins, generates flesh and alleviates pain.

-Xue Jie - Invigorates the Blood, dispels Blood Stasis, stops bleeding, protects the surface of ulcers, prevents decay, generates flesh and alleviates pain. With Mo Yao and Ru Xiang, for pain, swelling or hemorrhage. With Er Cha, Mo Yao and Ru Xiang, for bruising, swelling and pain. With Ming Fan, stops bleeding without causing Stasis for sores that have perforated but fail to heal.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, reduces swelling, generates flesh and alleviates pain.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain, reduces swelling, generates flesh and promotes healing. With Ru Xiang, topically for skin lesions and ulcerations swollen, painful sores and sores that are hard but not painful.

-Er Cha - Drains Dampness and absorbs suppuration Stops bleeding and generates

flesh. With Xue Jie, Ru Xiang and Mo Yao, topically as a powder for non-healing oozing sores.

-Ming Fan - Purges Fire, relieves toxicity, dries Dampness, alleviates itching, restrains and inhibits sores, generates flesh and transforms putrefication. With Xiong Huang, topically for Wind-Damp-Heat toxin in the muscles and skin with severe itching that results in a yellow exudate after scratching. With Er Cha, topically for bleeding from trauma.

-Xiong Huang - Relieves toxicity, dries Dampness, expels Phlegm and inhibits the growth of cancer cells. With Ming Fan, for Wind-Damp sores and sores with redness, swelling, itching and pain.

TREATS

Huge, infected mammary carcinoma. Breast cancer.

* GYNECOMASTIA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes Yin and Blood. Moves Qi and Blood. Breaks up Blood Stasis. Transforms Phlegm. Dissipates nodules

SYNDROMES - Yin and Blood Deficiency with Qi, Blood and Phlegm Stagnation

CLINICAL MANIFESTATIONS - A benign enlargement of the male breast. Although it is usually bilateral, it can be unilateral.
A rubbery or firm mass extending concentrically from the nipples.

HERBS AND ACTIONS

-Jie Zi - Warms the Lungs, regulates Qi, expels Phlegm, promotes Qi movement, dissipates nodules, unblocks the collaterals and alleviates pain.

-E Zhu - Invigorates Blood circulation, dispels Blood Stasis, regulates Qi, dissolves accumulations and alleviates pain.

-Xiang Fu - Spreads and regulates Liver Qi.

-Ban Xia - Dries Dampness, transforms Phlegm, dissipates nodules and reduces Stagnation.

-Tao Ren - Breaks up Blood Stasis, invigorates Blood circulation and drains abscesses.

-Bai Shao - Nourishes the Blood, softens the Liver, astringes Yin and adjusts the Ying and Wei. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang ,

for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis, reduces swelling, expels pus, generates flesh and alleviates pain. With Bai Shao, regulates and harmonizes Qi and Blood. With Xiang Fu, tonifies Blood and moves Qi.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and fills the Marrow. With Dang Gui for Blood Deficiency marked by dizziness, palpitations and insomnia.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Dang Gui and Shu Di Huang, for night sweats due to Yin Deficiency. With Shu Di Huang, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

TREATS

Gynecomastia.

* IMPOTENCE #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Kidney Yang. Warms the Kidneys. Disperses Cold

SYNDROMES - Kidney Yang Deficiency

CLINICAL MANIFESTATIONS - Low libido. An inability to get or sustain an erection. Infertility. Low sperm motility. Low sperm count. Watery ejaculate. Lumbago: low back feels cold, weak and aching. Feeling chilled. Aversion to Cold. Intolerance of cold. Cold limbs. General debility. Pale face. Blurred vision. Poor memory. Urinary frequency with abundant, clear urine or. Oliguria with edema. Maybe nocturia. Edema of the lower limbs with scanty urination. Lassitude. Listlessness. Fatigue. Withdrawn, subdued behavior. Knees feel cold and aching. Cold feet. Dizziness. Tinnitus. Deafness. Impotence. Spermatorrhea. Premature ejaculation. Maybe anorexia. Maybe loose stools. Lower abdominal distention. Constipation or. Loose stools. Maybe chronic diarrhea or "cock crow" diarrhea.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Fu Zi and Rou Gui, for Kidney Yang Deficiency. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine, benefits the marrow, tonifies the Kidneys and Liver and improves vision.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin, benefits Jing and brightens the eyes. With Shu Di Huang, for Liver and Kidney Deficiency. With Shu Di Huang, Fu Zi, Rou Gui and Shan Zhu Yu, for Kidney Yang Deficiency.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang.

-Fu Pen Zi - Tonifies and stabilizes the Kidneys, tonifies Yang, astringes Jing and urine and improves vision.
With Tu Si Zi and Gou Qi Zi, for impotence and spermatorrhea due to Kidney Deficiency.

-Ba Ji Tian - Tonifies the Kidneys and strengthens Yang. With Yin Yang Huo, Fu Zi and Rou Gui, for impotence or infertility associated with waning of Ming Men Fire.

-Yin Yang Huo - Tonifies the Kidneys, strengthens Yang and increases the libido. With Xian Mao, for chills, impotence with cold sperm, cold extremities and infertility.

-Xian Mao - Tonifies the Kidneys, strengthens Yang, expels Cold and eliminates Dampness. With Yin Yang Huo and Ba Ji Tian, for impotence.

-She Chuang Zi - Warms and tonifies the Kidneys and strengthens Yang.

-Fu Zi - Warms Ming Men Fire and assists Heart, Kidney and Spleen Yang. With Tu Si Zi, Rou Gui and Yin Yang Huo, for impotence.

-Rou Gui - Warms the Kidneys, Spleen and Heart and strengthens Yang and Ming Men Fire. With Fu Zi, for Deficiency of Ming Men Fire with impotence or infertility.

TREATS

Impotence.

* INFERTILITY #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Cools the Blood. Nourishes Yin. Clears Deficiency Heat. Invigorates the Blood

SYNDROMES - Kidney Yin Deficiency with Empty Fire Rising

CLINICAL MANIFESTATIONS - Long-term infertility. Early menstruation. Decreased menses with light colored Blood. Emaciation. Dizziness. Night sweating. Blurred vision. Palpitations. Insomnia. Tinnitus. Five sole Heat or. Low-grade fever in the afternoon.

NOTES - This formula is suitable when the tongue is particularly red.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Xuan Shen and Mai Dong, for a dry throat, irritability, a red tongue, and a fast thready pulse due to Devastated Yin with Blazing Fire and constipation due to Excess Heat with Yin Deficiency. With Bai Shao, for Blood Deficiency Heat. With Xuan Shen, for Kidney Yin Deficiency with Fire Blazing with soreness and swelling in the throat, dry mouth and a parched tongue.

-Bai Shao - Nourishes the Blood, regulates menstruation and astringes Yin.

-Di Gu Pi - Cools the Blood, drains Yin Deficiency Fire, eliminates lurking Heat, and clears Heat from the bones.

-Xuan Shen - Clears Heat, cools the Blood and nourishes Yin.

-Mai Dong - Moistens the Lungs, nourishes Yin and nourishes Stomach Yin. With Di Huang, for hematemesis or epistaxis due to Yin Deficiency with Excess Heat.

-Qing Hao - Clears Deficiency fevers.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat, soothes irritability, nourishes the Blood and calms the Spirit.

-Yi Mu Cao - Invigorates the Blood, dispels Blood Stasis, regulates menstruation, clears Heat and resolves toxicity.

TREATS

Infertility.

* MENSTRUATION-REGULATING FORMULA (Dr. Joel Penner, americandragon.com)

ACTIONS - Moves Qi.Invigorates the Blood

SYNDROMES - Qi and Blood Stagnation

CLINICAL MANIFESTATIONS - Pain that is fixed, stabbing and /or severe or. Pains that move around. Distention. Depression. Irritability. Pan is worse with pressure. Dark complexion. Fixed, palpable masses. Bleeding with clots. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas,. Varicose and

spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and regulates the menses. With Tao Ren and Hong Hua, for amenorrhea, pain, swelling and other symptoms associated with Blood Stasis. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis. With Xiang Fu, tonifies the Blood and moves Qi, for premenstrual symptoms, menstrual pain and irregular menstruation. With Tao Ren, Hong Hua, Chuan Xiong and Chi Shao, for amenorrhea due to Blood Deficiency and Stagnation.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Dang Gui, Hong Hua and Chi Shao, for menstrual pain, amenorrhea or irregular menstruation due to Blood Stasis.

-Ze Lan - Invigorates the Blood, dispels Blood Stasis and regulates menstruation. With Chuan Xiong, for pain due to trauma, dysmenorrhea and amenorrhea. With Chuan Xiong, Dang Gui, Tao Ren and Hong Hua, for pain and bruises.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis and relieves pain. With Chuan Xiong and Dang Gui, for Blood-Stasis induced gynecological disorders such as immobile abdominal masses and amenorrhea with abdominal pain. With Tao Ren, for Blood Stasis induced menstrual disorders, especially those characterized by early period, excessive bleeding and thick purple clots. With Xiang Fu, for flank pain, abdominal pain and dysmenorrhea due to Qi and Blood Stagnation. With Tao Ren, Hong Hua and Chuan Xiong, for Blood Stagnation in the chest.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels, unblocks menstruation and alleviates pain. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis. With Yi Mu Cao, for Blood Stasis with abdominal pain or postpartum lochiostasis. With Tao Ren, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain. With Tao Ren, Dang Gui, Chuan Xiong and Chi Shao, for menstrual pain or amenorrhea.

-Niu Xi - Invigorates the Blood, expels Blood Stasis and nourishes Liver and Kidney Yin. With Dang Gui, Tao Ren and Hong Hua, for menstrual pain, irregular menstruation and postpartum pain.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi. With Xiang Fu, for Qi Stagnation combined with Blood Stasis. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses and amenorrhea. With Dang Gui, Tao Ren and Hong Hua, for abdominal pain accompanying menstruation. With Hong Hua and Ze Lan, for amenorrhea.

-Xiang Fu - Spreads and regulates Liver Qi, regulates menstruation and alleviates pain. With Dang Gui and Chuan Xiong, for irregular menstruation and dysmenorrhea due to Qi and Blood Stasis.

-Yi Mu Cao - Invigorates the Blood, dispels Stasis and regulates menstruation. With Dang Gui, for Blood Stasis with infertility, irregular menstruation, lower abdominal pain and fullness and scanty menstruation. With Dang Gui and Chuan Xiong, for dysmenorrhea or lower abdominal pain due to postpartum Blood Stasis. With Ze Lan, for disorders which include both Blood Stasis and accumulation of pathogenic water such as Blood separation (amenorrhea followed by generalized edema).

-Shu Di Huang - Nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Qing Pi - Spreads Liver Qi and breaks up Stagnant Qi. With Xiang Fu, for pain and distention of the flanks due to Liver Qi Stagnation.

-Chen Pi - Regulates and descends Qi, adjusts the Middle and relieves the diaphragm. With Qing Pi, for flank pain and chest and abdominal distention due to Liver Qi Stagnation.

TREATS

Endocrine dyscrasia infertility

* METABOLIC SYNDROME #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Heat. Purges accumulations. Drains Fire. Transforms Dampness. Cools the Blood. Invigorates the Blood. Dispels Blood Stasis. Tonifies Qi and Blood. Moistens Dryness

SYNDROMES - Metabolic syndrome. Dry Heat with Blood and Phlegm Stagnation

CLINICAL MANIFESTATIONS - Alternating fever and chills. Fullness in the chest and hypochondrium with or without pain). Bitter taste in mouth. Nausea. Continuous vomiting. Hard focal distension in the epigastrium. Fullness and pain in the epigastrium. Burning diarrhea or no bowel movement. Despondency. Slight fidgeting. Slight irritability. Headache. Constipation or discharge of fluids rectally. Tinnitus. Diminished hearing. Diminished vision. Red eyes. Manic behavior. Asthma. Mental instability.

HERBS AND ACTIONS

-Da Huang - Drains Heat, purges accumulations, drains Fire, transforms Dampness, promotes urination, eliminates Phlegm, drains Heat from the Blood, invigorates the

Blood and dispels Blood Stasis. With Mang Xiao, eliminates obstruction in the Intestines for severe constipation with passage of liquid but no solid stool.

-Huang Qi - Tonifies Qi and Blood, promotes urination, reduces edema, generates flesh and expels toxins.

-Zhi Zi - Clears Heat, reduces Fire, eliminates irritability, drains Damp-Heat, relieves toxicity and cools and activates the Blood.

-Gan Cao - Tonifies the Spleen, augments Qi, resolves Phlegm, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

-Mang Xiao - Purges accumulations, guides out Stagnation, softens hardness, moistens Dryness, clears Heat and drains Fire. With Da Huang, for constipation due to Heat in the Stomach and Intestines. With Da Huang and Gan Cao, for moderate constipation due to accumulation of Excess Heat.

TREATS

Hyperglycemia. Coronary Heart disease. Obesity. Arteriosclerosis. Stroke.

* XIAO KE FANG - 消渴方 - Wasting And Thirsting Formula

ACTIONS - Clears Lung Heat. Drains Fire. Nourishes Yin. Generates fluids

SYNDROMES - Xiao Ke. Lung Heat

CLINICAL MANIFESTATIONS - Thirst. Drinks a lot of water. Hot esophagus. Dry mouth. Polyuria. Urine can be clear, red or turbid.

HERBS AND ACTIONS

-Huang Lian - Clears Heat, drains Dampness, drains Fire, resolves Fire toxicity and clears Heart Fire. With Di Huang, for insomnia and delirium due to unremitting Heat injuring the Ying level.

-Tian Hua Fen - Clears and drains Lung Heat, transforms Phlegm and moistens Lung Dryness.

-Di Huang - Nourishes Yin, generates fluids, increases saliva and treats wasting and thirsting.

-Ou Jie - Eliminates Heat from the Blood and stops bleeding, especially due to Lung or Stomach Heat.

TREATS

Diabetes - Upper Xiao.

* ZUO GUI WAN - 左歸丸 - Restore the Left (Kidney) Pill. Left Gold Pill. Replenishing the Yin (Left) Pills

ACTIONS - Nourishes Yin. Tonifies the Kidneys. Supplements Jing. Benefits Marrow

SYNDROMES - Kidney Jing Insufficiency. Liver and Kidney Yin Deficiency (especially essence and marrow). Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency

CLINICAL MANIFESTATIONS - Light-headedness. Vertigo. Tinnitus. Soreness and weakness in low back and legs. Spontaneous and nocturnal emissions. Night sweats. Dry mouth and throat. Thirst with a desire to drink. Dizziness. Forgetfulness. Deafness. Rhinitis. Dribbling of urine. Malar flush. Five Sole Heat. Insomnia. Hair loss. Loss of teeth. Infertility. Amenorrhea. Uterine bleeding. Spontaneous perspiration. Spermatorrhea. Poor vision.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution and modify for those with Spleen and Stomach Deficiency. Contraindicated for those with signs of Excess Heat. This formula is not suited for long-term use.

NOTES - This is a stronger version of Zuo Gui Yin and is used in more severe cases.

HERBS AND ACTIONS

-Shu Di Huang - Enriches Kidney Yin and nourishes Jing and Blood. With Gou Qi Zi and Shan Zhu Yu, nourishes Liver Blood.

-Shan Yao - Benefits the Yin and the Spleen tonifies the Kidneys and astringes Jing. With Shu Di Huang and Shan Zhu Yu, for Kidney Deficiency with spermatorrhea and night sweats.

-Gou Qi Zi - Nourishes Blood, tonifies the Liver and kidneys, nourishes Yin and benefits Jing.

-Shan Zhu Yu - Astringes Jing, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Shu Di Huang and Shan Yao, for urinary frequency (day or night), dizziness, tinnitus and lower back pain due to Kidney Deficiency.

-Niu Xi - Invigorates the channels and Blood, and treats atrophy and spasm of the lower extremities.

-Tu Si Zi - Tonifies Kidney Yang, tonifies Kidney and Liver Yin, and astringes Jing and urine.

TREATS

Intestinal hemorrhage. Spermatorrhea. Chronic lumbago. Diabetes. Addison's disease. Tuberculosis of the bones. Chronic bronchitis. Hypertension, especially in the elderly. Impotence. Multiple neuritis. Scanty menstruation. Chronic pharyngitis. Knee pain. Acute gastritis. Optic atrophy. Dizziness. Myasthenia gravis. Multiple sclerosis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Polyuria. Senile dementia. Sperm abnormality. Hyperthyroidism. Fatigue. Herniated lumbar disc. Night sweats. Epstein-Barr virus syndrome. Low back pain. Chemotherapy for breast cancer. Atrophy (Wei) Syndrome. Amyotrophic lateral sclerosis (ALS). Hot flashes. Menopause syndrome. Infertility. Uterine bleeding. Amenorrhea. Chronic nephritis. Lumbar strain. Infertility due to premature ovarian failure. Polyneuritis. Late menstruation. Obesity. Insomnia. Alopecia. Vertigo. Hysterical paralysis. Periodic paralysis. Facial paralysis. Progressive myodystrophia. Progressive myodystrophy. Acute infectious multiple neuritis. Parkinson's disease. Anemia. Deafness. Presbycusis. Age related Hearing loss. Forgetfulness. Weakness. Male menopause. Meniere's disease. Spontaneous perspiration. Myalgic encephalomyelitis. Heel pain. Foot pain.

1.3.3.29 RT-TCM-29

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_29

Amyotrophic lateral sclerosis #1, Amyotrophic lateral sclerosis #2, Bone Spur #1, Cerebral Thrombosis #1, Chronic Kidney Failure #1, Dermatitis Medicamentosa #1, Fu Fang Ku Shen Tang, Gastric Hyperacidity #1, Wen Dan Tang (modified for acid reflux)

Recordings Updated in June 2025

* AMYOTHOPHIC LATERAL SCLEROSIS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies the Liver and Kidneys. Nourishes Yin. Tonifies Yang. Nourishes the Blood. Clears Heat. Activates the Blood. Nourishes the sinews and bones

SYNDROMES - Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency

CLINICAL MANIFESTATIONS - Weakening and wasting of the muscles. All four limbs become involved. May be considerable cramping and stiffness. Partial loss of nervous

control over the muscles. Respiration is affected.

HERBS AND ACTIONS

-Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Xu Duan - Tonifies the Liver and Kidneys, strengthens and reconnects the sinews and bones, promotes the movement of Blood, alleviates pain and generates flesh. With Du Zhong and Niu Xi, for deficient Kidneys or Cold-Damp Bi causing low back and leg pain and weakness, and contracture of the leg muscles.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine, benefits the marrow and tonifies the Kidneys and Liver. With Du Zhong, enriches and tonifies the Kidneys and Liver, astringes Jing, nourishes Kidney Yin, brightens the eyes and encourages the movement of Primal Yang to treat spermatorrhea, premature ejaculation and lower back pain from Kidney Deficiency.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and tonifies Kidney Yang. With Xu Duan, tonifies the Liver and Kidneys, strengthens the lower back and secures the Chong and Ren channels to treat aching in the lower back and knees, weakness of the legs which makes walking difficult and especially threatened miscarriage due to instability of the Chong and Ren channels.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism.

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, moderates and harmonizes the harsh properties of other herbs and alleviates pain. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency. With Di Huang, powerfully clears Deficiency Fire Blazing Upward.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and stops pain due to Blood Stasis. With Huang Qi, for many Blood Deficiency patterns. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat.

-Bai Shao - Nourishes the Blood and astringes Yin. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews.

-Huang Bai - Drains Kidney Fire. With Zhi Mu, for Yin Deficiency fever with steaming bones and night sweats. With Di Huang and Gui Ban, for steaming bone disorder and spermator-rhea due to Yin Deficiency. With Dang Gui and Niu Xi, for a sore and weak low back and legs.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin, moistens Dryness, generates Fluids, clears Deficiency Fire and quenches thirst. With Huang Bai, clears Heat and Drains Fire for Yin Deficiency Fire.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Bai Zhu, for anorexia and other symptoms of Damp Obstruction due to Spleen Deficiency.

TREATS

Amyotrophic lateral sclerosis (ALS)

* AMYOTHOPHIC LATERAL SCLEROSIS #2 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Nourishes the Blood

SYNDROMES - Qi and Blood Deficiency

CLINICAL MANIFESTATIONS - Muscle and flesh wilting. Limpness and lack of strength in the four limbs. Shortness of breath. Disinclination to speak. Fatigue. Loose stools. Poor appetite. Dizziness. Pale face. Weak voice. Reluctance to speak. Sweating with little or no exertion. Palpitations. Insomnia. Dry skin. Dry hair. Poor memory. Paleness. Scanty periods.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, raises the Yang Qi of the Spleen and Stomach, tonifies Wei Qi, stabilizes the Exterior, tonifies the Lungs and relieves numbness and pain. With Dang Gui, generates and nourishes Blood. With Dang Shen, for Qi Deficiency with general debility, anorexia, and spontaneous sweat. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, nourishes the Blood and calms the Spirit.

-Ji Xue Teng - Invigorates and tonifies the Blood, invigorates the channels and relaxes the sinews.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Fu Ling, for Spleen and Stomach Deficiency with

fatigue, a sensation of fullness in the abdomen, dizziness, lethargy, shortness of breath, anorexia and loose stools or diarrhea. With Bai Zhu, for Spleen Qi Deficiency with anorexia, loose stools and vomiting. With Bai Zhi, Gan Cao, Bai Shao and Dang Gui, for Qi and Blood Deficiency.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and alleviates pain. With Huang Qi, for many Blood Deficiency patterns. With Bai Shao, regulates and harmonizes Qi and Blood and treats Blood Deficiency Heat.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind and alleviates pain. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews for muscle spasms, pain and numbness, especially in the calf, due to Blood Deficiency. With Dang Gui, nourishes Yin and Blood.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, clears Heat, cools the Blood and relieves pain. With Bai Shao, for spasms and cramping pain associated with Blood Deficiency and Blood Stagnation.

-Shan Yao - Tonifies the Spleen, nourishes Stomach Yin, tonifies Lung Qi, nourishes Lung Yin, strongly tonifies the Kidneys and astringes Jing. With Fu Ling and Bai Zhu, for Spleen Deficiency with loose watery stools. With Dang Shen, for Spleen and Kidney Deficiency with fatigue, weakness, anorexia and watery stools.

-Bai Zhu - Strengthens the Spleen and dries Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Fu Ling - Dries Dampness, strengthens the Spleen and moderates the drying nature of Gan Cao. With Dang Shen and Bai Zhu, for weak and deficient Spleen with fatigue, anorexia and loose stools.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency. With Dang Shen, Fu Ling and Bai Zhu, strengthens the Spleen and augments Qi.

TREATS

Amyotrophic lateral sclerosis (ALS)

* BONE SPUR #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies, invigorates and harmonizes the Blood. Dispels Blood stasis. Dispels Wind-Dampness. Unblocks the channels. Relaxes the sinews. Increases Qi and

Blood circulation. Dries Dampness

SYNDROMES - Wind-Dampness with Blood Stagnation

CLINICAL MANIFESTATIONS - Bone spur.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis.

-Wei Ling Xian - Dispels Wind-Dampness, unblocks the channels, reduces Phlegm and pathogenic water and alleviates pain. With Niu Xi, for Wind-Damp Bi causing joint pain (especially in the lower joints).

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation, unblocks the channels, harmonizes the Stomach and transforms Dampness.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones and aids the smooth flow of Qi and Blood.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes Liver and Kidney Yin, strengthens the sinews and bones, benefits the joints and clears Damp-Heat in the Lower Jiao. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency.

-Ji Xue Teng - Invigorates and tonifies the Blood, invigorates the channels and relaxes the sinews.

-Bai Zhu - Tonifies the Spleen, augments Qi, Dries Dampness, promotes water metabolism, stabilizes the Exterior and stops sweating. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and transforms Phlegm.
With Bai Zhu, strengthens the Spleen and resolves Dampness.

TREATS

Bone spur.

* CEREBRAL THROMBOSIS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Sedates the Liver. Extinguishes Wind. Nourishes Yin. Anchors Yang. Tonifies Qi. Activates the Blood. Unblocks the channels. Promotes movement in the limbs

SYNDROMES - Liver Wind Stirring Internally: Liver Yang (Liver Fire) Transforms into Wind with Qi and Yang Deficiency and Blood Stasis Obstructing the Channels

CLINICAL MANIFESTATIONS - Dizziness. Vertigo. A feeling of distention in the eyes. Tinnitus. Feverish sensation in the head. Headache. Irritability. Flushed face as if intoxicated. Swelling of the eyes. Frequent belching. Progressive motor dysfunction occurring over hours to days. Development of facial asymmetry. Sudden loss of consciousness. Spasms. Heat and pain of the brain. Mental confusion with moments of lucidity. Inability to fully recover after loss of consciousness. Hiccups. Belching. Irritable Heat in the Heart. Tremors. Limited mobility of the limbs. Hemiplegia. Paralysis. Atrophy of the lower limbs. Facial paralysis. Slurred speech. Drooling. Dry stools. Frequent urination. Urinary incontinence. Deviation of the eyes and mouth. Excess salivation. Cold extremities. Asthenia.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen and relieves numbness and pain.

-Dan Shen - Activates the Blood, dispels Blood Stasis, clears Heat, soothes irritability, nourishes the Blood and calms the Spirit. With Dang Gui, Hong Hua and Chuan Xiong, for external or traumatic injury with pain and bruising.

-Dai Zhe Shi - Calms the Liver, anchors Floating Yang and clears Liver Fire. With Niu Xi, for dizziness, vertigo, headache and tinnitus due to Liver Yang Rising.

-Niu Xi - Activates the Blood, expels Blood Stasis, nourishes Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints. With Dai Zhe Shi for dizziness and vertigo from Liver Yang Rising due to Liver and Kidney Yin Deficiency.

-Dang Gui - Tonifies, activates and harmonizes the Blood. With Huang Qi, for Qi and Blood Deficiency. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood.

-Chi Shao - Activates the Blood, dispels Blood Stasis, relieves pain, Clears Heat, cools the Blood and Clears Liver Fire. With Dang Gui and Tao Ren, for Blood Stasis. With Huang Qi for hemiplegia with Deficiency.

-Chuan Xiong - Activates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, harmonizes, nourishes and activates the Blood and disperses Blood Stasis. With Dang Gui, Hong Hua and Tao Ren, for pain due to trauma

and headache from Blood Stagnation. With Huang Qi for numbness of the limbs. With Huang Qi, Hong Hua and Dang Gui, for numbness of the limbs and paralysis.

-Tian Dong - Nourishes Kidney Yin, clears Lung Heat and sedates Fire.

-Tao Ren - Breaks up Blood Stasis and activates Blood circulation. With Dang Gui, Chi Shao and Hong Hua, for trauma with pain.

-Hong Hua - Activates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Tao Ren, activates the Blood for all types of Blood Stagnation.

TREATS

Cerebral thrombosis.

* CHRONIC KIDNEY FAILURE #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Strengthens the Spleen. Tonifies the Kidneys. Promotes urination. Invigorates the Blood

SYNDROMES - Spleen and Kidney Qi Deficiency With Fluid Binding to Edema

CLINICAL MANIFESTATIONS - Edema below the waist. Fatigue. Cold limbs. Low back and knee soreness and pain. Scanty urination. A dark complexion. Abdominal distention. A sticky feeling in the mouth. A bland taste in the mouth. Either a tendency towards being too hot of too cold. A tendency to loose stools. Shortness of breath. Purple lips and nails. No thirst or thirst with no desire to drink. Asthma. Irregular menstruation.

HERBS AND ACTIONS

-Dan Shen - Invigorates the Blood and dispels Blood Stasis.

-Yu Jin - Invigorates the Blood, dispels Blood Stasis, regulates Qi flow and alleviates pain.

-Mu Dan Pi - Invigorates the Blood and dispels Blood Stasis.

-Ze Lan - Invigorates the Blood, dispels Blood Stasis, promotes urination and disperses swellings. With Yi Mu Cao, for Blood Stasis and accumulation of pathogenic water.

-Niu Xi - Invigorates the Blood, expels Blood Stasis and nourishes Liver and Kidney Yin.

-Dang Gui - Nourishes and invigorates Blood, disperses Cold and stops pain due to Blood Stasis.

-Yi Mu Cao - Invigorates the Blood, dispels Stasis, promotes urination and reduces swelling and edema.
With Dang Gui, for Blood Stasis.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Mu Xiang, for diarrhea and borborygmus due to Dampness. With Zhu Ling, promotes urination.

-Zhu Ling - Promotes urination and leaches out Dampness. With Da Fu Pi, for urinary difficulty, edema, and abdominal distention.

-Hou Po - Moves Qi, transforms Dampness and warms and invigorates the Spleen.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Da Fu Pi, for Spleen Qi Deficiency with Dampness Accumulating in the skin and floating edema.

-Da Fu Pi - Moves Qi, promotes urination, expels Dampness and reduces edema.

-Mu Xiang - Moves Qi, strengthens the Spleen and alleviates pain. With Bai Zhu, for anorexia with epigastric and abdominal pain and distention.

TREATS

Chronic Kidney failure. Oliguria.

* DERMATITIS MEDICAMENTOSA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Eliminates Dampness. Resolves toxicity

SYNDROMES - Toxic Damp-Heat

CLINICAL MANIFESTATIONS - Dermatitis after ingestion of drugs. High fever. Irritability. Fidgeting. Dry mouth. Dry throat. Incoherent speech. Insomnia. Dark urine. Deep-rooted boils. Maculae. Carbuncles. Hematemesis. Hemoptysis. Palpitations. Furuncles. Tinnitus. Purpura. Red face. Rashes. Deep-rooted boils. Red eyes. Itchy skin. Fidgeting. Dry lips. Delirium. Dysentery with fever. Jaundice. Epistaxis. Hematuria. Cloudy mind. Diarrhea.

HERBS AND ACTIONS

-Pu Gong Ying - Clears Heat, resolves Dampness and relieves Fire toxicity.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity, cools the Blood and clears Damp-Heat from the Lower Jiao. With Lian Qiao, for various Heat disorders. With Gan Cao, for toxic swellings and sores.

-Lian Qiao - Clears Heat, relieves toxicity, clears Blood Heat and promotes urination.

-Zhi Zi - Clears Heat, reduces Fire, drains Damp-Heat, cools and invigorates the Blood, relieves toxicity and Reduces swelling. With Mu Dan Pi, resolves Qi Level Stagnation leading to Heat and Heat in the Blood. With Huang Lian, Da Huang and Lian Qiao, for irritability and restlessness with high fever due to Toxic Heat. With Huang Lian, Huang Qin and Lian Qiao, for boils and carbuncles. With Da Huang, for constipation.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, relieves pain, clears Heat, cools the Blood and reduces swelling from sores and abscesses.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen.

-Che Qian Zi - Promotes urination and clears Damp-Heat.

-Ze Xie - Promotes urination and leaches out Dampness. With Fu Ling, for stagnant water and Dampness.

-Da Huang - Drains Heat, purges accumulations, drains Fire, reduces Fire toxicity, drains Heat from the Blood, transforms Dampness and promotes urination. With Chi Shao, for chronic accumulation in the abdomen, blockage of urine and constipation.

-Gan Cao - Clears Heat, relieves Fire toxicity, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Jin Yin Hua, for damp rashes or acne. With Jin Yin Hua and Pu Gong Ying, for Yang sores marked by redness, swelling and pain.

TREATS

Dermatitis medicamentosa. Drug dermatitis.

* FU FANG KU SHEN TANG - 复方苦参汤 - Sophora Compound

ACTIONS - Clears Heat. Dries Dampness. Resolves toxicity. Disperses Wind. Alleviates pain and itching

SYNDROMES - Damp-Heat

CLINICAL MANIFESTATIONS - Main sites involved:. Antecubital and popliteal fossae. Lesions:. Pinpoint papules. Papulovesicles. Vesicles, some of which coalesce. Slight infiltration and severe itching are likely. Bleeding or exudation follows. Rupture of skin

after scratching. The skin is rough and itchy. Disturbing sleep. Scratching will cause slight bleeding or result in the formation of bloody crusts.

HERBS AND ACTIONS

-Shi Gao - Heals eczema, burns and ulcerated sores and wounds.

-Ku Shen - Clears Heat, dries Dampness, disperses Wind, kills parasites and stops itching.

-Zhang Nao - Expels Wind and Dampness, kills parasites, invigorates the Blood, disperses Cold and alleviates pain.

-Lu Dou - Clears Heat and relieves toxins.

-Bing Pian - Clears Heat, drains Fire, resolves toxicity, dissipates nodules and alleviates pain and itching.

TREATS

Summer dermatitis. Itch. Diaper rash. Skin inflammation.

* GASTRIC HYPERACIDITY #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Calms the Liver. Settles Yang. Astringes Fluids. Clears Heat. Transforms Phlegm. Absorbs acidity. Stops pain

SYNDROMES - Gastric Hyperacidity

CLINICAL MANIFESTATIONS - Distention and fullness in the chest and epigastrium. Abdominal distention with occasional pain. Rotten smelling belching. Acid regurgitation. Nausea and vomiting. Aversion to food. Maybe diarrhea. Dysentery. Maybe constipation. Anorexia. Bad breath. Intermittent fever.

HERBS AND ACTIONS

-Wu Wei Zi - Astringes the leakage of Lung Qi, tonifies the Kidneys, astringes Jing and stops diarrhea and spermatorrhea.

-Zhe Bei Mu - Clears Heat and transforms Phlegm.

TREATS

Gastric hyperacidity.

* WEN DAN TANG - 溫膽湯 - Warm Gallbladder Decoction (modified for acid reflux)

ACTIONS - Regulates Qi. Transforms Phlegm. Clears the Gallbladder. Harmonizes the Stomach. Dries Dampness. Dispels Heat

SYNDROMES - Phlegm-Fire Disturbs the Heart. Gallbladder Deficiency Heat. Disharmony Between the Gallbladder and Stomach with Phlegm Heat. Qi Stage Gallbladder Damp-Heat

CLINICAL MANIFESTATIONS - Dizziness. Vertigo. Nausea and vomiting. Insomnia. Dream-disturbed sleep with unusual dreams. Palpitations. Anxiety. Profuse white foamy sputum. Restlessness. Timidity. Indecisiveness. Indeterminate gnawing hunger. Seizures accompanied by copious sputum. Flushing up. Chest distention. Expectoration of yellow Phlegm. Bitter taste in the mouth. Chills and fever. Abdominal distention. Frequent dark, scanty urine. Irritability. Depression. Slight thirst. Anorexia after serious illness.

HERBS AND ACTIONS

-Zhu Ru - Clears Heat and Phlegm from the Gallbladder and Stomach, cools Blood and descends rebellious Qi. With Ban Xia and Zhi Shi, for insomnia, palpitations and irritability due to Phlegm Heat leading to disharmony between the Gallbladder and Stomach with a stifling sensation in the chest and restlessness. With Zhi Shi, for Phlegm-Heat obstructing the flow of Qi with focal distention in the chest and epigastrium, hiccup, dry retching, nausea and acid regurgitation and palpitations, irritability, insomnia and emotional problems due to Gallbladder constraint with Phlegm Disturbing the Heart. With Ban Xia, Chen Pi, Zhi Shi and Fu Ling, for Gallbladder Fire with Phlegm.

-Zhi Shi - Reduces accumulation, descends Qi, transforms Phlegm and reduces distention. With Chen Pi, strengthens the Middle Jiao.

-Ban Xia - Transforms Phlegm, descends rebellious Qi, harmonizes the Stomach and stops vomiting. With Chen Pi, for Spleen and Stomach Qi Disharmony with epigastric and abdominal distention or pain. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools, treats Phlegm, thin mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia.

-Chen Pi - Regulates Qi, tonifies the Spleen, transforms Phlegm and descends Qi. With Ban Xia, for excessive white, viscous sputum due to Phlegm-Damp Obstruction. With Sheng Jiang, for manifestations of Stomach Qi Disharmony and Cold-Dampness Obstructing the Middle with nausea and hiccup. With Ban Xia, Zhu Ru and Sheng Jiang, for nausea and vomiting due to rebellious Stomach Qi.

-Fu Ling - Resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Gan Cao, strengthens the Spleen, drains Dampness, harmonizes the Middle Jiao and calms the Shen. With Chen Pi, for nausea and vomiting due to congested Fluids. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention, and anorexia due to congested fluids. With Ban Xia, Chen Pi and Sheng Jiang, for congested fluids in the Stomach causing nausea and vomiting.

-Gan Cao - Resolves Phlegm, clears Heat, tonifies the Spleen and harmonizes and moderates the harsh properties of the other herbs.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, protects the Stomach and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen.

-Sheng Jiang - Regulates the relationship between the Gallbladder and the Stomach and assists in stopping vomiting. With Da Zao, protects the Stomach Qi. With Ban Xia, for vomiting due to Cold, Thin Mucus. With Zhu Ru, for vomiting due to Heat in patients with Stomach Qi Deficiency. With Chen Pi, for Cold-Dampness Obstructing the Middle with nausea and hiccup.

+Huang Lian - Damp-Heat in the Stomach or Intestines with vomiting and/or acid regurgitation.

+Wu Zhu Yu - Spreads the Liver, descends rebellious Qi. Stops acid regurgitation and vomiting.

TREATS

Chronic gastritis. Peptic ulcer. Chronic hepatitis. Neurosis. Early stages of schizophrenia. Psychosis. Meniere's disease. Chronic bronchitis. Hypertension. Myocarditis. Pericarditis. Morning sickness. Menopause syndrome. Depression. Stroke. Male menopause. Epilepsy. Nephropathy. Diabetic foot. Organophosphorus poisoning. Vegetative nervous dysfunction with palpitations. Cardiac arrhythmia. Anxiety. Glaucoma. Irritable bowel syndrome. Dysentery. Dizziness. Vaginal discharge. Polyuria. Nausea/Vomiting. Amyotrophic lateral sclerosis (ALS). Anxiety neurosis. Reactive psychosis. Obsessive compulsive disorder. Migraine. Schizophrenia. Impotence. Otitis externa. Acid reflux. Anorexia. Post-stroke paralysis. Otorrhea. Labyrinths. Gastroptosis. Hysteria. Side effects of chemotherapy. Bi-polar disorder. Acute or chronic tracheitis. Pulmonary emphysema. COPD. Asthma. Timidity. Angina. Premature atrial contractions. Cholecystitis. Severe insomnia. Autonomic dystonia. Alopecia. Tinnitus. Deafness. Melancholia. Diabetes mellitus. Diabetic retinopathy. Pneumonia. Hyperthyroidism with insomnia. Vestibular neuritis with dizziness. Palpitations. Insomnia. Coronary Heart Disease. Gastralgia. Vertigo. Oliguria. AIDS/HIV. Fever. Neurasthenia. Insanity. Involutional psychosis. Senile dementia. Neurosis. Abdominal fullness and distention. Deafness. Otitis media. Chronic pancreatitis. Indigestion. Ear pain.

1.3.3.30 RT-TCM-30

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_30

Bushen-Tiansui Formula, Danhong Injection, Huangpu Tongqiao Capsule, Kaixin Powder, Kang Shuai Lao Pian,
Neurodegeneration TCM-Formulas-Molecules, Ren Shen Bu Wan, Tongluo Xingnao Tablet, Yinxing Pingchan Recipe

Recordings Updated in June 2025

* BUSHEN-TIANSUI FORMULA (BTF) is based on the traditional Chinese medicine theory of the mutual relationship between the brain and the kidney and is intended to treat neurodegenerative diseases. This formulation has been used for several years to treat patients with Alzheimer's disease- (AD-) like symptoms. Herbs - Tian Dong, Shu Di Huang, Ren Shen, Huang Bai, Sha Ren, Gan Cao, Nu Zhen Zi, Gou Qi Zhi, Yin Yang Huo, Chuan Xiong

* DANHONG INJECTION treatment of cardiovascular (e. g. acute coronary syndrome) and cerebrovascular diseases (e.g. ischemic stroke) in clinics all over China. Herb - Danshen, Honghua

* HUANGPU TONGQIAO CAPSULE (HPTQC) is a traditional Chinese medicine (TCM) that has been used to treat Alzheimer's disease (AD). HPTQC significantly improved the learning and memory function, and decreased neuronal apoptosis in vivo and in vitro. In addition, HPTQC could decrease the mRNA and protein expression levels of GRP78, CHOP, Caspase12, Caspase9, and Caspase3, and the effect trend was consistent with the specific inhibitor of GRP78. Huangpu Tongqiao Capsule (HPTQC) is a Chinese Medicine formula developed by the First Affiliated Hospital of Anhui University of Chinese Medicine that has been used in the treatment of vascular dementia for many years. HPTQC has a protective effect against AD in vitro and in vivo by inhibiting the apoptosis pathway mediated by endoplasmic reticulum stress, which may provide new insight into the protective effects and molecular mechanism of HPTQC against AD. Herbs - Da Huang, Shi Chang Pu, Ren Shen, Zhi Mu, Chuan Xiong, Yi Zhi

* KAIXIN POWDER (KXP) is a classic formula for treating morbid forgetfulness in ancient China. Kaixin Powder is a classic prescription for invigorating Qi, nourishing the mind, and calming the mind. It has pharmacological effects of improving learning and memory ability, resisting oxidation, delaying aging, and promoting the differentiation and

regeneration of nerve cells. It is mainly used in the modern clinical treatment of amnesia, depression, dementia, and other diseases. The mechanisms of KP in treating depression firstly involved the regulation of several pathology modules, including lipid metabolism, synapse function and inflammation. KP could regulate imbalances of lipid homeostasis in high-fat diet induced depressive symptoms. Furthermore, it was validated that cholesterol metabolism dysfunction can be ameliorated by KP, which was correlated with upregulation of the AdipoR1-BDNF (brain-derived neurotrophic factor) co-regulatory pathway. Herbs - Ren Shen, Fu Ling, Shi Chang Pu, Yuan Zhi

* KANG SHUAI LAO PIAN (Anti-aging tablets) is a popular anti-aging that works to promote a healthy heart, brain, as well as nervous and immune systems. Kang Shuai Lao Pian nourishes the spirit, promotes alertness and a healthy attitude. Relaxes you and soothes tensions when experiencing fatigue. Energizes you both mentally and physically so that you can better perform your daily activities as you age. It is suitable for men and women over 50. Continual use is recommended.

KSLP could improve High Fat Diet HFD-induced obesity, glucose tolerance disorder, as well as gut dysbiosis. In the gut, KSLP corrected the increased abundance of Firmicutes and Proteobacteria, increased ratio of Firmicutes/Bacteroidetes, and decreased abundance of Bacteroidetes caused by HFD. KSLP also reversed HFD-induced significant changes in the abundance of certain genus including Intestinimonas, Oscillibacter, Christensenellaceae_R-7_group, Ruminococcaceae_UCG-010, and Aliihoeflea.

KSLP is a promising traditional Chinese medicine (TCM) applicable for individuals with high-fat diet habit. Intestinimonas, Oscillibacter, and Christensenellaceae_R-7_group might be responsible for the regulatory effect of KSLP. Herbs - Ren Shen, Di Huang, Tian Dong, Di Gu Pi, Mai Dong, Fu Ling

* NEURODEGENERATION TCM-FORMULAS-MOLECULES

Each group plays for 5 minutes. In order,

- Kaixin Powder, Sargramostim, T3D-959, Retatrutide, MCC950

- Kang Shuai Lao Pian, Resveratrol, Epsilon-Viniferin, Polydatin, Pimavanserin

-Levodopa, Carbidopa, Entacapone, Selegiline, Curcumin, Salidroside

- Huangpu Tongqiao, Danhong Injection, Gantenerumab, 6h0e: FAB dmCBTAU-22.1 In Complex With Tau Peptide V1088-23

- Tongluo Xingnao, Neflamapimod, Bezisterim, Ezeprogind, MK-8719, Rosmarinic Acid, Nattokinase, Honokiol

- Ren Shen Bu Wan, Acacetin, Spinacetin, Theacrine, Trilobatin

- Qi Bao Mei Ran Dan, Sesamin, Sesamol, Dihydromyricetin

- Bushen-Tiansui

-Yinxing Pingchan, Elabela, Metformin, Phloretin

* REN SHEN BU WAN Ginseng Tonic Pill is a modern patent medicine from Central Medical Manufactory, Tianjin, China. Ren shen, an herbal tonic for heart and spleen qi is reinforced with medicinals to support both kidney yang (rou cong rong, hai ma) and kidney yin (nan sha shen, huai niu xi), which together boost kidney qi. Shan zhu yu astringes the formula into the kidney. The formula is a good tonic for aging patients, as well as those with diminished kidney fire affecting digestion and vitality. It is also used for poor memory or concentration, and weak lower back or knees. Herbs - Ren Shen, Rou Cong Rong, Bei Sha Shen, Shan Zhu Yu, Niu Xi, Fu Ling

* TONGLUO XINGNAO TABLET can improve the learning and memory capacity, reduce pathological changes of hippocampal tissues of rats with chronic cerebral ischemia-induced learning and memory dysfunction model, and promote the expression of Na(+)-K(+)-ATPase in hippocampus. It also promotes the expression of insulin-degrading enzyme in hippocampus and improves learning and memory capacity of AD rats. Its effect in promoting intelligence will be related to increased insulin-degrading enzyme in hippocampus. Herbs - Chuan Xiong, Huang Qin, Dang Gui

* YINXING PINGCHAN RECIPE (YXPC) and its components, i.e. the components for detoxicating (A), for calming liver (B) and for dissolving blood stasis(C), in preventing and treating Parkinson's disease, and the path of its inhibition on nigrostriatal dopaminergic neuron (DAn) apoptosis in model mice of Parkinson's disease. Herbs - Jin Yin Hua, Huang Lian, Huang Qi, Shu Di Huang, Bai Guo Ren, Ge gen, Hong Jing Tian, Bai Shao, Tian Ma, Gou Teng, Gan Cao

1.3.3.31 RT-TCM-31

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Fang Ji Fu Ling Tang, Heart Blood Deficiency #1, Heat Bi #1, Hot Foot Soak #1, Juan Bi Tang, Kidney Failure Enema #1, Medicated Oil #1, Muscle Bi #1, Qi Bao Mei Ran Dan

Recordings Updated in June 2025

* FANG JI FU LING TANG - 防己茯苓湯 - Stephania and Poria Decoction

ACTIONS - Augments Qi. Unblocks Yang. Promotes urination. Reduces edema

SYNDROMES - Skin edema

CLINICAL MANIFESTATIONS - Pitting edema, worse in the extremities. A sensation of heaviness in the body and extremities. Fibrillations in the skin and muscles of the extremities. Dysuria.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with skin edema with Heat Stagnation. Contraindicated for those with Internal edema with a deep pulse.

HERBS AND ACTIONS

-Han Fang Ji - Promotes urination, reduces edema especially in the lower body, expels Wind-Dampness and alleviates pain. With Fu Ling, Gui Zhi and Gan Cao, for edema in constitutionally weak patients and swelling due to Leg Qi.

-Huang Qi - Tonifies Wei Qi, stabilizes the Exterior, aids circulation of moisture downward from the face, promotes urination and reduces edema. With Han Fang Ji, for Wind edema with numbness, pain, swelling of the face and extremities, sweating, sensitivity to Wind, and reduced urination. With Han Fang Ji, Gui Zhi and Fu Ling, for superficial floating edema with swelling of the extremities.

-Gui Zhi - Releases the Exterior, assists Yang, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels, warms the Middle and directs Turbid Yin downward. With Han Fang Ji, for Wind-Cold Damp Bi. With Fu Ling, unblocks Yang and facilitates the removal of congested fluids associated with Yang Deficiency edema.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Gan Cao, for Spleen and Heart Deficiency causing facial edema, palpitations and shortness of breath.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Skin edema. Cardiac edema. Oliguria. Nephritic edema. Nephritis.

* HEART BLOOD DEFICIENCY #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes the Blood. Calms the Shen

SYNDROMES - Heart Blood Deficiency

CLINICAL MANIFESTATIONS - Palpitations. Maybe arrhythmia. Pale nails. Pale lips. Pale inner surface of the eyelids. Restlessness. Insomnia. Poor memory. Vertigo. Numbness.

HERBS AND ACTIONS

- Lu Jiao - Tonifies the Kidneys. strengthens Yang, strengthens Jing and Blood, strengthens the sinews and bones, benefits marrow and tonifies and nourishes Qi and Blood. With Shu Di Huang, for impotence and spermatorrhea (men) and infertility and thin vaginal discharge (women) due to Kidney Deficiency Cold.

-Chuan Niu Xi - Invigorates the Blood, dispels Blood Stasis, tonifies the Kidneys and Liver and strengthens the tendons and bones.

-Rou Cong Rong - Tonifies the Kidneys, strengthens the Yang and benefits Jing and marrow. With Du Zhong, for high blood pressure.

-Tian Men Dong - Nourishes the Kidney Yin.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao and drains Kidney Fire. With Du Zhong, Niu Xi and Dang Gui, for Bi syndrome with sore and weak low back and knees.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing, stops diarrhea and spermatorrhea, tonifies Qi, quiets the Spirit and calms and contains Heart Qi.

-Suo Yang - Tonifies the Kidneys, benefits Jing and marrow, strengthens Yang, nourishes Liver Yin and Blood and strengthens sinews and bones. With Rou Cong Rong, for impotence or infertility due to insufficiency of the Liver and Kidneys along with exhausted Jing and Blood.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Rou Cong Rong, for Blood Deficiency failing to supply the sinews of the Intestines, interfering with peristalsis.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Dang Gui, for Blood Deficiency marked by

dizziness, palpitations, insomnia and menstrual dysfunction.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin. With Shu Di Huang, for Liver and Kidney Deficiency.

-Du Zhong - Tonifies the Kidneys and Liver, strengthens the sinews and bones, aids the smooth flow of Qi and Blood and lowers blood pressure.

TREATS

Palpitations. Forgetfulness. Cardiac arrhythmia.

* HEAT BI #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Resolves Fire toxicity. Expels Wind-Dampness. Alleviates pain. Invigorates the Blood. Expels Blood Stasis

SYNDROMES - Heat Bi

CLINICAL MANIFESTATIONS - Arthralgia involving one or several joints of the extremities. Knee swelling is frequent. Local redness and Heat. Swelling with excruciating pain. Severe limitation of movement. Pain better during the day and worse at night. Fever. Sometimes slight chills and fever. Thirst. Dryness of the mouth and tongue. Irritability. Nervousness. Restlessness. Aversion to Heat. Desire for Cold drinks. Dark urine.

HERBS AND ACTIONS

-Jin Yin Hua - Clears Heat, resolves Fire toxicity, vents and disperses External Wind-Heat and clears Damp-Heat from the Lower Jiao. With Lian Qiao, for various Heat disorders.

-Lian Qiao - Clears Heat, especially in the Upper Jiao and relieves toxicity. With Jin Yin Hua, for initial stage Wind-Heat.

-Fang Feng - Releases the exterior, expels External Wind, expels Wind-Dampness and alleviates pain. With Qin Jiao, for Wind Dampness Bi with spasms of the tendons or numbness of the limbs.

-Qin Jiao - Expels Wind-Dampness, opens the channels, soothes the sinews and collaterals, moistens the Intestines and unblocks the bowels.

-Yan Hu Suo - Invigorates the Blood, circulates Qi and stops pain.

-Du Huo - Dispels Wind-Dampness and alleviates pain. With Fang Feng, for numbness

in the legs.

-Sang Ji Sheng - Tonifies Liver and Kidney Yin, strengthens the sinews and bones and expels Wind-Dampness. With Du Huo and Niu Xi, for Kidney and Liver Yin Deficiencies and Wind-Dampness causing low back and leg pain, stiffness and soreness.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints.

TREATS

Heat Bi. Rheumatoid arthritis. Fever. Osteoarthritis. Arthralgia.

* HOT FOOT SOAK #1 (Dr. Joel Penner, americandragon.com) Topical

ACTIONS - Invigorates the Blood. Clears Damp-Heat

SYNDROMES - Blood Stasis. Damp-Heat

CLINICAL MANIFESTATIONS - Pain that is fixed, stabbing and /or severe. Pain is worse with pressure. Dark complexion. Fixed, palpable masses. Bleeding with clots. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas. Varicose and spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots. Tongue, red purple if there is Heat and blue purple if there is Cold. Soreness, heaviness and lack of strength of the four extremities or of the two lower extremities. Possible progressive paralysis or atrophy. Insensitivity, numbness or tingling of the four extremities. Limb aching and pain. Burning Heat which is ameliorated by Cold. Generalized fever which is not easily alleviated. Possible deviation of the face, mouth and eyes. Poor appetite. Thirst with no desire to drink. Nausea/vomiting. Abnormal vaginal discharge. Red, hot, rough, painful urination. Loose stools.

HERBS AND ACTIONS

-Xi Xian Cao - Dispels Wind-Dampness, strengthens the sinews, unblocks the channels and collaterals, clears and transforms Damp-Heat and eliminates toxins.

-Ji Xue Teng - Invigorates and tonifies the Blood, activates the channels and relaxes the sinews.

-Ren Dong Teng - Clears Heat, resolves toxicity, dispels Wind-Dampness, soothes the sinews, unblocks the channels and clears Damp-Heat from the Lower Jiao.

-Ai Ye - Warms the channels, disperses Cold, eliminates Dampness and alleviates pain.

-Wu Jia Pi - Dispels Wind-Dampness, nourishes and warms the Liver and Kidneys,

strengthens the sinews and bones, transforms Dampness and reduces swelling.

-Tou Gu Cao - Invigorates Blood circulation, breaks up Blood Stasis, reduces swelling, clears Heat, eliminates toxins, cools the Blood, relieves pain, drains Damp-Heat, dispels Wind and Dampness and relaxes the muscles and sinews.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain.

-Ku Shen - Clears Heat, dries Dampness and disperses Wind.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain and reduces swelling.

TREATS

Peripheral neuropathy.

* JUAN BI TANG - 蠲痺湯 - Remove Painful Obstruction Decoction

ACTIONS - Removes Wind-Dampness. Disperses Cold. Eliminates Painful Obstruction. Circulates Qi and Blood. Stops pain

SYNDROMES - Wind-Cold-Damp Bi. Muscular atrophy due to Qi and Blood Stagnation

CLINICAL MANIFESTATIONS - Joint pain, especially in the wrist, ankle, knee and elbow. Muscle pain. There may be numbness and heaviness in the limbs. The pain is worse with Cold and better with warmth. The pain is aggravated by Wind. The pain aggravated by Dampness. The pain is stabbing. Muscle weakness. Difficult movement. Numbness of the muscles and skin. Hemiplegia, especially of the upper limbs. The pain alleviated by movement. Slight muscle edema. Heaviness of the joints. Cold joints. Aversion to Cold. The pain worse at night. Local inflammation. Migratory pain. Deviation of the eyes and mouth. Spasm of the limbs.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat in the channels.

NOTES - Warms without drying. Unblocks without causing damage. Stronger Wind relieving and pathogen expelling action than Juan Bi Tang from Selected Formulas.

HERBS AND ACTIONS

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction (Bi), alleviates pain, increases joint mobility and guides Qi to the Tai Yang and DU channels. With Du Huo, relieves pain in the upper and lower

parts of the body.

-Du Huo - Releases the Exterior, dispels Wind-Cold-Dampness, opens the channels, vitalizes vessels and stops pain. With Qiang Huo for joint pain and numbness.

-Qin Jiao - Clears Heat, expels Wind-Dampness, relaxes the sinews, clears Deficiency Heat and resolves Dampness. With Sang Zhi, and Hai Feng Teng, expels Wind-Dampness.

-Sang Zhi - Expels Wind, clears the channels, eases the joints, stops spasms and regulates water metabolism, especially useful for muscle spasms and painful obstruction of the upper extremities.

-Hai Feng Teng - Expels Wind-Damp, clears the channels, disperses Cold, stops pain - good for immobile joints. With Gui Zhi for pain, impaired joint movement and spasms of the sinews due to Wind-Damp Bi.

-Dang Gui - Nourishes Blood, invigorates and harmonizes Blood, disperses Cold and stops pain. With Chuan Xiong, nourishes and invigorates Blood to subdue Wind and stop pain.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold and stops pain.

-Ru Xiang - Breaks up Blood Stagnation, invigorates the Blood, regulates Qi, relaxes the sinews, opens the channels, reduces swelling. and treats localized pain.

-Mu Xiang - Moves Qi, revives the Spleen, dispels Dampness, improves fluid metabolism and sedates pain.

-Gui Zhi - Releases External Wind-Cold from the muscle layer, harmonizes the Ying and Wei, warms the channels and collaterals, relieves pain, disperses Cold, unblocks Yang, transforms Qi, warms and facilitates the flow of Yang Qi in the chest and warms and facilitates the flow of Blood through the vessels.

-Gan Cao - Moderates and harmonizes the harsh properties of the other herbs and prevents injury to normal Qi.

TREATS

Osteoarthritis. Rheumatoid arthritis. Gouty arthritis. Bursitis. Facial paralysis. Fibromyalgia. Numbness. Wei Syndrome. Hemilateral sweating. Neck pain and stiffness. Low back pain. Rheumatic fever. Rheumatic arthritis. Chronic lumbago. Arthralgia. Stroke. Cerebral vascular accident. Paresthesia. Scapulohumeral periarthritis. Weakness. Frozen shoulder. Gout. Temporomandibular joint syndrome (TMJ).

* KIDNEY FAILURE ENEMA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Drains Heat and Fire. Purges accumulations. Transforms Dampness. Promotes urination. Reduces Fire toxicity

SYNDROMES - Damp-Heat

CLINICAL MANIFESTATIONS - Oliguria.

HERBS AND ACTIONS

-Da Huang - Drains Heat and Fire, purges accumulations, transforms Dampness, promotes urination and reduces Fire toxicity. With Di Huang, for Deficiency Fire.

-Pu Gong Ying - Clears Heat, resolves Dampness and unblocks painful urinary dysfunction.

-Chi Shao - Clears Heat and cools the Blood. With Da Huang, for blockage of urine.

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids.

-Ban Lan Gen - Drains Heat, relieves Fire toxicity and cools the Blood.

-Hou Po - Promotes the movement of Qi downward and dries Dampness. With Zhi Shi, for Dampness or Phlegm as long as clumped Qi is at the root of the problem. With Zhi Shi and Da Huang, for relatively severe accumulation and Stagnation with abdominal distention and pain and constipation.

-Zhi Shi - Breaks up Stagnant Qi, reduces accumulation, descends Qi and unblocks the bowels. With Da Huang, for Diarrhea, dysentery, and abdominal pain due to Damp-Heat.

TREATS

Kidney failure. Oliguria.

* MEDICATED OIL #1 (Dr. Joel Penner, americandragon.com) Topical

ACTIONS - Disperses Wind-Cold. Unblocks nasal passages. Drains Dampness. Absorbs suppuration. Aromatically opens orifices

SYNDROMES - Nasal congestion

CLINICAL MANIFESTATIONS - Nasal congestion.

HERBS AND ACTIONS

-E Bu Shi Cao - Disperses Wind-Cold, unblocks the nasal passages resolves Phlegm and stops cough.

-Er Cha - Drains Dampness, absorbs suppuration, clears Heat, clears the Lungs and transforms Phlegm.

-Bing Pian - Aromatically opens orifices, revives the Spirit and unblocks closed disorders.

TREATS

Nasal congestion. Allergic sinusitis. Allergic rhinitis.

* MUSCLE BI #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Warms the Spleen and Kidneys. Tonifies Qi and Blood

SYNDROMES - Muscle Bi due to Spleen and Kidney Deficiencies

CLINICAL MANIFESTATIONS - Muscle weakness and numbness. Pale complexion. Muscle softness and atrophy. Emaciation. Difficulty swallowing. Aversion to Cold.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood and Jing and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Shan Zhu Yu, nourishes Kidney Yin and secures Jing, while restraining urination and sweating. With Shan Zhu Yu and Shan Yao, for dizziness, weak and sore back, impotence, spermatorrhea and night sweats, due to Kidney and Liver Yin Deficiencies. With Fu Zi and Rou Gui, for Kidney Yang Deficiency.

-He Shou Wu - Tonifies the Liver and Kidneys and nourishes Blood.

-Shan Yao - Tonifies Kidney Yin and astringes Jing.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing, tonifies Liver and Kidney Yin and strengthens Kidney Yang. With Dang Gui and Shu Di Huang, for night sweats due to Yin Deficiency. With Shu Di Huang, Shan Yao, and Fu Zi, for Kidney Yang Deficiency.

- Lu Jiao - Tonifies the Kidneys. strengthens Yang, strengthens Jing and Blood, strengthens the sinews and bones, benefits marrow and tonifies and nourishes Qi and Blood. With Shu Di Huang, for impotence and spermatorrhea (men) and infertility and

thin vaginal discharge (women) due to Kidney Deficiency Cold.

-Fu Zi - Warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold and Dampness, warms the channels and stops pain. With Rou Gui, for Damp-Cold Bi in the channels with generalized aches and pains and difficulty rotating the trunk. With Rou Gui and Shu Di Huan, for Kidney Yang Deficiency with waning of Ming Men Fire with aversion to Cold, weak and sore back and legs, impotence, and urinary frequency.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens the Yang and Ming Men Fire, disperses deep Cold, warms and unblocks the channels and vessels and alleviates pain. With Fu Zi, Shan Zhu Yu and Shu Di Huang, for Kidney Yang Deficiency.

-Ba Ji Tian - Tonifies the Kidneys, strengthens Yang, disperses Wind-Cold-Damp and strengthens the sinews and bones.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis and regulates the menses.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Dang Gui and Shu Di Huang, for Qi and Blood Deficiencies with dizziness, weakness and lassitude. With Shu Di Huang and He Shou Wu, for Blood Deficiency.

-Zhi Ma Qian Zi - Unblocks the channels and collaterals, disperses clumps, reduces swelling and alleviates pain.

TREATS

Muscle Bi.

* QI BAO MEI RAN DAN - 七宝美髯丸 - Seven-Treasure Special Pill for Beautiful Whiskers

ACTIONS - Enriches the Kidney Jing. Nourishes the Liver Blood

SYNDROMES - Kidney Jing and Liver Blood Deficiency

CLINICAL MANIFESTATIONS - Premature graying of the hair. Hair loss. Loose teeth. Spontaneous emissions. Nocturnal emissions. Weak and sore low back and knees.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution or do not use for those with Spleen Deficiency.

HERBS AND ACTIONS

-He Shou Wu - Tonifies the Liver and Kidneys, nourishes Blood, nourishes Jing and expels Wind from the skin by nourishing the Blood. With Gou Qi Zi, Bu Gu Zhi and Tu Si Zi, for premature graying of hair due to Kidney and Liver Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao.

-Niu Xi - Invigorates the Blood, expels Blood Stasis and nourishes Liver and Kidney Yin.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and disperses Cold for Blood Stasis with Blood Deficiency.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin and benefits Jing. With He Shou Wu, Dang Gui, Niu Xi and Tu Si Zi, for prematurely gray hair and loose teeth.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and urine, benefits the marrow and tonifies the Kidneys and Liver.

-Bu Gu Zhi - Tonifies the Kidneys, strengthens Yang and stabilizes Jing.

TREATS

Prematurely gray hair. Dental problems. Premature aging. Decreased sperm motility. Lumbago. Aplastic anemia. Chronic infectious hepatitis. Impotence. Alopecia. Male infertility. Nocturnal emissions. Spermatorrhea. Low sperm count. Frequent urination. Osteoporosis. Menopause syndrome. Knee pain.

1.3.3.32 RT-TCM-32

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_32

Hemiplegia #1, Influenza #3, Insect Dermatitis #1, Insomnia #1, Lupus #1, Lyme Disease #1, Nephrotic Syndrome #1, Paraplegia #1, Parkinson's #1

Recordings Updated in June 2025

* HEMIPLEGIA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Invigorates the Blood. Breaks up Stasis

SYNDROMES - Qi Deficiency with Blood Stagnation

CLINICAL MANIFESTATIONS - Hemiplegia. Weak limbs. Lack of strength. Fatigue. Loose stools. Anorexia. Dizziness. Pale face. Weak voice. Reluctance to speak. Sweating with little or no exertion. Pain that is fixed, stabbing and /or severe. Pan is worse with pressure. Dark complexion. Purple lips. Purple nails. Dry skin. Blue, dark or purplish discoloration of skin in small or large areas. Varicose and spider veins. Cold hands and feet. Tendency to hemorrhage dark blood or clots.

HERBS AND ACTIONS

-Ren Shen - Tonifies Qi. With Shu Di Huang, for severe Qi and Blood Deficiency.

-Huang Qi - Tonifies Qi and Blood, tonifies Wei Qi, stabilizes the Exterior and relieves numbness and pain. With Ren Shen, for Qi Deficiency with general debility, anorexia, fatigue, tired extremities and spontaneous sweating.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and alleviates pain. With Huang Qi, for Qi and Blood Deficiency. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness and paralysis.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation.

-Lu Lu Tong - Promotes the movement of Qi, invigorates the Blood, opens the Middle Jiao, unblocks the channels, expels Wind and promotes water metabolism.

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

TREATS

Hemiplegia. Post-stroke paralysis.

* INFLUENZA #3 (Dr. Joel Penner, americandragon.com)

ACTIONS - Releases the Exterior. Clears Heat. Regulates the throat

SYNDROMES - Wind-Heat Attacking the Lungs

CLINICAL MANIFESTATIONS - Inflammation of throat and/or tongue. Fever and chills

with more fever than chills. Sweating or. Absence of sweating. Cough with sticky yellow sputum. Aversion to Wind and Heat. Yellow nasal discharge. Thirst with desire for cold drinks. Headache. General bodily soreness and malaise. Throat is red. The tonsils are swollen and engorged but without any particular pus spots. Red bumps around mouth and lips (herpes simplex). Nasal obstruction. Sore, swollen throat. Dyspnea. Chest pain. Dry mouth. Rapid breathing. Maybe constipation. Maybe scanty urine.

HERBS AND ACTIONS

-Jin Yin Hua - Disperses Wind, clears Heat and relieves toxicity. With Lian Qiao and Niu Bang Zi , for Wei Stage and Qi Stage Heat and pneumonia with Heat signs. With Lian Qiao, Jie Geng, Ban Lan Gen and Niu Bang Zi, for pain and swelling of the throat.

-Lian Qiao - Disperses Wind, clears Heat and relieves toxicity. With Niu Bang Zi, for Wei Stage Heat. With Jin Yin Hua, for Initial stage Wind-Heat.

-Ban Lan Gen - Drains Heat, relieves Fire toxicity, cools the Blood and benefits the throat.

-Ge Gen - Discharges Exterior conditions, releases the muscles especially of the neck and upper back, relieves Heat, generates fluids and relieves thirst.

-Sang Ye - Disperses and scatters Wind-Heat, clears Heat from the Lungs, stops coughing and moistens Dryness. With Ju Hua, for Wind-Heat induced cough, eye redness, swelling, fever, headache, sore throat and pain.

-Ju Hua - Disperses Wind, clears Heat and detoxifies. With Ban Lan Gen, for Wind-Heat with a sore throat.

-Niu Bang Zi - Disperses Wind-Heat, benefits the throat, relieves Heat and toxins, and spreads Lung Qi. With Jie Geng, for throat inflammation and productive cough due to Wind-Heat. With Lian Qiao, unblocks and drains Heat toxin and disperses clumps and swellings, for a sore, swollen throat.

-Dan Zhu Ye - Generates Fluids, alleviates thirst and clears Heat.

-Jie Geng - Disperses the Lungs, stops cough, resolves Phlegm and descends Qi. With Sang Ye and Ju Hua, for Wind-Heat coughing with a mild fever and thirst.

TREATS

Influenza.

* INSECT DERMATITIS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Toxic Heat. Stops itching

SYNDROMES - Toxic Heat

CLINICAL MANIFESTATIONS - Dermatitis. High fever. Irritability. Fidgeting. Dry mouth. Dry throat. Incoherent speech. Insomnia. Dark urine. Deep-rooted boils. Maculae. Carbuncles. Hematemesis. Hemoptysis. Palpitations. Furuncles. Tinnitus. Purpura. Red face. Rashes. Deep-rooted boils. Red eyes. Itchy skin. Fidgeting. Dry lips. Delirium. Dysentery with fever. Jaundice. Epistaxis. Hematuria. Cloudy mind. Diarrhea.

HERBS AND ACTIONS

-Jin Yin Hua - Clears Heat and resolves Fire toxicity. With Gan Cao, for toxic swellings and sores. With Pu Gong Yin, Ye Ju Hua and Zi Hua Di Ding, for sores, lesions carbuncles, ulceration of the skin and furuncles.

-Pu Gong Ying - Relieves Fire toxicity. With Jin Yin Hua and Ye Ju Hua, for sores, lesions and ulcerations of the skin.

-Ye Ju Hua - Drains Fire and resolves toxicity.

-Zi Hua Di Ding - Clears Heat, relieves Fire toxicity and clears hot sores. With Ye Ju Hua, for red swellings.

-Huang Qin - Clears Heat, dries Dampness, drains Fire and detoxifies. With Zhi Zi, for sores due to Heat toxin.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity. With Huang Qin, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis and rashes and irritability in warm-febrile diseases. With Huang Qin and Zhi Zi, for a high fever, irritability, dry mouth and throat and dark urine due to Fire toxin in the three burners.

-Zhi Zi - Clears Heat, reduces Fire, resolves Dampness and relieves toxicity.

-Che Qian Zi - Promotes urination and clears Damp-Heat.

-Gan Cao - Clears Heat and relieves Fire toxicity, antidote for many toxic substances, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Pu Gong Yin, for abscesses or other toxic swellings. With Jin Yin Hua, Pu Gong Ying and Zi Hua Di Ding, for Yang sores marked by redness, swelling and pain.

TREATS

Insect dermatitis.

* INSOMNIA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Heat. Drains Fire. Nourishes Yin. Cools Heart Fire. Promotes urination. Quiets the Heart. Calms the Spirit

SYNDROMES - Heart Fire

CLINICAL MANIFESTATIONS - Insomnia. Difficulty falling asleep. Dream disturbed sleep. Ulceration, erosion, and pain of mouth and tongue. Thirst with a desire for cold drinks. Restlessness. Irritability. Irascibility. Feeling of Heat and disturbance in the Heart. Flushed face. Bitter taste in the mouth. Scanty, dark urine. Maybe painful urination. Maybe hematuria.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Cinnabaris Zhu Sha is toxic and should only be taken in low doses for a short time. (It is not used any longer.)

HERBS AND ACTIONS

-Sheng Di Huang - Clears Heat, cools the Blood, Nourishes Yin, generates fluids and cools Heart Fire.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin and moistens Dryness. With Huang Bai, clears Heat and Drains Fire for Yin Deficiency Fire.

-Zhi Zi - Clears Heat, reduces Fire and eliminates irritability.

-Huang Bai - Drains Kidney Fire. With Zhi Zi,resolves constraint and directs Qi downward for clearing Heat and Fire from the Liver channel.

-Mu Tong - Drains Heart Heat through the Small Intestine. With Deng Xin Cao, for difficult, scanty and burning urination associated with Heart channel Heat shifting to the Large Intestine or Heat clumping in the Bladder or Damp-Heat lodging in the Lower Jiao.

-Gan Cao - Clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

-Deng Xin Cao - Promotes urination, leaches out Dampness, unblocks painful urinary dysfunction, clears Heat from the Heart channel by directing Fire downward and calms the Spirit.

-Fu Ling - Promotes urination, leaches out Dampness, quiets the Heart, calms the Spirit and soothes the nerves.

-Mai Men Dong - Clears the Heart, eliminates irritability and nourishes Yin.

-Shan Yao - Tonifies Kidney Yin and astringes Jing.

-Han Sui Shi - Clears Heat, promotes urination, reduces edema and directs Fire downward.

-Zhu Sha - Sedates the Heart and calms the Spirit.

TREATS

Insomnia.

* LUPUS #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Tonifies Qi. Nourishes Yin

SYNDROMES - Qi and Yin Deficiency

CLINICAL MANIFESTATIONS - Fatigue. Long-standing low-grade fever. A pale face. Poor appetite. Loose stools. Dizziness. Weak voice/reluctance to speak. Malar flush. Anxiety. Hot flashes. Dysphoria with Five Sole Heat. General malaise. Lack of Spirit. Spontaneous perspiration or. Night sweats. Chest oppression. Shortness of breath. Red patches on the face. Arthralgia. Palpitations. Hair loss.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, promotes the discharge of pus, generates flesh, expels toxins and generates Body Fluids. With Dang Gui, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesias. With Mai Dong and Wu Wei Zi, for night sweats.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With HUang Qi, for Lung and Spleen Qi Deficiency with fatigue, shortness of breath, diarrhea and anorexia. With Dang Gui and Shu Di Huang, for Qi and Blood Deficiency with dizziness, weakness and lassitude. With Wu Wei Zi and Mai Dong, for injury to Qi and fluids with shortness of breath and thirst.

-Nu Zhen Zi - Nourishes and tonifies Liver and Kidney Yin and clears Deficiency Heat.

-Wu Wei Zi - Astringes leakage of Lung Qi, tonifies Qi,tonifies the Kidneys, astringes Jing, and sweat and generates fluids.

-Mai Men Dong - Nourishes Lung and Stomach Yin and generates Fluids. With Huang

Qi, Dang Gui and Wu Wei Zi, for irritability due to severe loss of fluids due to sweating.

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, reduces swelling, expels pus, generates flesh and alleviates pain. With Huang Qi, for ulcerated abscesses with insufficient drainage or which drain a clear thin discharge.

-Tai Zi Shen - Strengthens the Spleen, tonifies Qi and generates Body Fluids. With Wu Wei Zi, nourishes Fluids.

-Mo Han Lian - Nourishes and tonifies Liver and Kidney Yin. With Nu Zhen Zi, for dizziness, blurred vision, and pre-mature graying of the hair due to severe Liver and Kidney Yin Deficiency with ascendant Yang.

-Qin Jiao - Clears Deficiency Heat.

-Sang Zhi - Dispels Wind-Dampness, unblocks the channels and collaterals, benefits the joints and stops spasms.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat, cools the Blood and reduces abscesses.

TREATS

Lupus erythematosis.

* LYME DISEASE #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Clears Toxic Heat

SYNDROMES - Toxic Fire

CLINICAL MANIFESTATIONS - Pain. Swelling in the joints. Fever. Chills. Headache. Fatigue. Severe muscle aches. Conjunctivitis. Hemorrhages. Jaundice. Kidney and Liver dysfunction. End-stage: Dementia. Confusion. Memory loss. Delusions. Eventually, complete neurological breakdown.

HERBS AND ACTIONS

-Da Qing Ye - Clears Heat, resolves Fire toxicity, cools the Blood and dissipates maculae.

-Tu Fu Ling - Relieves toxicity, eliminates Dampness, benefits the joints and clears Damp-Heat from the skin.

-Ban Lan Gen - Drains Heat, relieves Fire toxicity, cools the Blood and benefits the throat.

-Zhi Zi - Clears Heat, reduces Fire, eliminates irritability, drains Damp-Heat, cools the Blood and relieves toxicity. With Huang Lian, Huang Qin and Lian Qiao, for boils and carbuncles. With Lian Qiao, for Heat entering the Pericardium.

-Chuan Xin Lian - Clears Heat, resolves Fire toxicity, dries Dampness and cools the Blood.

-Huang Qin - Clears Heat, dries Dampness, drains Fire, detoxifies, cools the Blood and calms ascending Liver Yang. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease. With Huang Lian and Zhi Zi, for acute febrile disease. With Zhi Zi, for sores due to Heat toxin. With Huang Lian, Huang Bai, and Zhi Zi, for lesions and sores with redness, swelling and pain.

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao, drains Fire and relieves Fire toxicity. With Zhi Zi, resolves constraint and directs Qi downward for clearing Heat and Fire from the Liver channel. With Huang Lian and Lian Qiao, for skin abscesses and lesions.

-Lian Qiao - Clears Heat, especially in the Upper Jiao, relieves toxicity and clears Blood Heat. With Ban Lan Gen, for any externally contracted Heat disorder. With Ban Lan Gen and Huang Lian, for acute infectious diseases.

-Qing Hao - Clears Summerheat or Damp-Heat, cools the Blood and clears Liver Heat.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity. With Huang Qin and Zhi Zi, for high fever, irritability, dry mouth and throat, and dark urine due to Fire toxin in the three burners.

-Gan Cao - Clears Heat ,relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

TREATS

Lyme disease.

* NEPHROTIC SYNDROME #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Warms the Kidneys. Strengthens the Spleen. Promotes diuresis to reduce edema

SYNDROMES - Spleen and Kidney Yang Deficiency

CLINICAL MANIFESTATIONS - Sallow complexion. Mental fatigue. Cold extremities. Bodily edema which is more severe in the region below the waist. Anorexia. Loose stool. Weakness of the loins. Oliguria.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, strengthens the Spleen, promotes urination and reduces edema. With Dang Shen, for Qi Deficiency. With Fu Zi, for Yang Deficiency with spon-taneous sweat.

-Dang Shen - Tonifies the Middle Jiao, augments Qi and assists herbs that drain downward when there is significant Qi Deficiency. With Fu Ling, for Spleen and Stomach Deficiency. With Bai Zhu, for Spleen Qi Deficiency.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Fu Ling and Yi Yi Ren, for Spleen and Stomach Deficiency with Dampness. With Fu Zi and Fu Ling, for edema due to Spleen and Kidney Yang Deficiency. With Huang Qi, for Lung and Spleen Qi Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Zhu Ling, promotes urination.

-Yi Yi Ren - Strengthens the Spleen and resolves Dampness. With Fu Ling for Spleen Deficiency with Excess Dampness and edema.

-Fu Zi - Disperses Cold and Dampness, warms the channels and stops pain. With Fu Ling, for Lower body edema and dysuria.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens the Yang and Ming Men Fire and assists the generation of Qi and Blood. With Fu Zi, powerfully tonifies Kidney Yang, for Kidney Yang Deficiency with lower back pain and weakness in the legs and knees.

-Zhu Ling - Promotes urination and leaches out Dampness.

-Mu Xiang - Promotes the movement of Qi, strengthens the Spleen, prevents

Stagnation and alleviates pain. With Bai Zhu, for anorexia with epigastric and abdominal pain and distention.

-Yin Yang Huo - Tonifies the Kidneys, strengthens Yang and increases the libido.

TREATS

Nephrotic syndrome.

* PARAPLEGIA #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Reinforces the Kidneys. Strengthens the bones. Invigorates the Blood. Dispels Blood Stasis. Relaxes muscles and tendons. Unblocks the collateral. Nourishes the nervous system. Recovers the urination and defecation functions. Promotes spinal cord growth

SYNDROMES - Traumatic injury to the spinal cord

CLINICAL MANIFESTATIONS - Paraplegia.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain.

-San Qi - Reduces swelling, alleviates pain, removes extravasated Blood and invigorates the Blood.

-Shu Di Huang - Nourishes Jing and Blood, fills the Marrow and nourishes Liver and Kidney Yin.

-Gou Teng - Extinguishes Wind, alleviates spasms, drains Liver Heat and pacifies Liver Yang.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi.

-Dong Chong Xia Cao - Tonifies Kidneys, strengthens the Yang and augments Jing.

-Xue Jie - Invigorates the Blood, dispels Blood Stasis and alleviates pain.

TREATS

Paraplegia.

* PARKINSON'S #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Nourishes the Blood. Invigorates the Blood. Clears the channels

SYNDROMES - Liver Blood Deficiency with Blood Stagnation

CLINICAL MANIFESTATIONS - Tremor, spasms or involuntary movements (chorea). Trembling feet and hands. Involuntary shaking of head. Tremor worse with emotional disturbances. Tremors disappear during sleep. Pill rolling tremor of the thumb and index finger or wrist. Maybe to and fro tremor of the head. Fixed facial expression like crying or smiling. Staring, unblinking eyes. Mouth slightly open often with drooling. Greasy facial skin. Seborrheic scaling. Muscular rigidity. Impaired movement. Stooping posture. Maybe oculogyric crisis. Gout. Speech difficulties. Pale complexion. Pale lips. Blurred or failing vision. Spots before eyes. Dizziness. Dry eyes. Pale nail beds. Irritability. Frightens easily. Insomnia with much dreaming. Tinnitus. Numbness of limbs. Light menses or amenorrhea. Late menses. Maybe trismus.

HERBS AND ACTIONS

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold and alleviates pain. With Bai Shao, regulates and harmonizes Qi and Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Gou Ji - Tonifies the Liver and Kidneys, strengthens the sinews and bones, expels Wind-Dampness and relieves pain. With Dang Gui, for Long term disease leading to lower extremity swelling.

-He Shou Wu - Tonifies the Liver and Kidneys, nourishes the Blood and nourishes Jing.

-Bai Shao - Nourishes the Blood, calms Liver Yang and Liver Wind, astringes Yin, adjusts the Ying and Wei and alleviates pain. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis.

-Dan Shen - Nourishes and invigorates the Blood, dispels Blood Stasis, clears Heat and calms the Spirit.

-Gu Sui Bu - Tonifies Kidney Yang, strengthens the sinews and bones, invigorates the Blood and promotes mending of sinews and bones.

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation and unblocks the channels. With Dang Gui and Bai Shao, for Blood Deficiency causing muscle spasms.

TREATS

Parkinson's disease.

1.3.3.33 RT-TCM-33

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_33

Foot Health Care Lotion-TCM, Foot Sole Callus-TCM, Gegen Qinlian Decoction, Miliaria Wash-TCM, Miliaria-Damp-Heat Type TCM, Miliaria Itch Repelent-TCM, Miliaria Preventing Liquor-TCM, Qiong Yu Gao, Zhi Tong Sheng Ji Powder

Recordings Updated in June 2025

* FOOT HEALTH CARE LOTION-TCM

The foot health care lotion Chinese medicinal composition has the effects of clearing away heat and toxic materials, promoting blood circulation to remove blood stasis, sterilizing, inhibiting bacteria, resisting bacteria, diminishing inflammation, dispelling wind, eliminating dampness, killing insects, healing sores, dredging collaterals, relieving itch, detoxifying, eliminating swell, promoting blood circulation to arrest pain, exfoliating scrub and the like, and can be used for treating and preventing dermatophytosis, improving human body blood circulation, prompting metabolism, prompting heart and cerebral vascular function, eliminating fatigue and improving sleeping.

Herbs - Xie Bai, Ge Gen, Hua Jiao, Sheng Jiang, San Qi, Wu Hua Guo, Hong Hua, Cha Ye, Bai Qian, Ai Ye, Ming Fan, Mi Cu, Rou Gui, Yuan Zhi, Cang Zhu.

* FOOT SOLE CALLUS-TCM

Herbs - Ai Ye, Hong Hua, Hua Jiao, Mang Xiao, Mi Cu, Shui

* GEGEN QINLIAN DECOCTION

Gegen Qinlian decoction (GQD) is a well-known classical TCM for diarrhea related to damp-heat syndrome. Effective in colon or liver-related diseases including ulcerative

colitis (UC) and type 2 diabetes.

Gegen Qinlian decoction enhances immunity and protects intestinal barrier function in colorectal cancer patients via gut microbiota. It also has anti-inflammatory effects on ameliorating hyperuricemia.

GQD significantly improves lung tissue damage, reduces pulmonary edema, and improves respiratory function in Acute Lung Injury.

GQD has been utilized to manage the inflammatory symptoms of metabolic diseases and to protect against renal damage in China.

Herbs - Gegen, Huangqin, Huanglian, Gancao.

* MILIARIA WASH-TCM

Herbs - Huang Bai, Ming Fan, Xu Chang Qing, Ju Hua, Di Fu Zi.

* MILIARIA-DAMP-HEAT TYPE-TCM

This formula warms the meridians and expells cold, sterilizes, diminishes inflammation and relieves itching. It has low side effects and increases body immunity.

Herbs - Ai Ye, Jin Yin Hua, Ren Dong Teng.

* MILIARIA ITCH REPELENT-TCM

Herbs - Bai Bu, Ai Ye, Ku Shen, Huang Bai, Bo He, Bing Pian, chlorhexidine acetate.

* MILIARIA PREVENTING LIQUOR-TCM

Diminish inflammation, detoxify, dispell miliaria and release itching, Activates blood and resolves stasis. The formula has a definite therapeutic effect on miliaria and other symptoms.

Herbs - Huang Lian, Sheng Di Huang, Ku Shen, Xiong Huang, Du Huo, Huang Qin, Ye Ju Hua, Di Fu Zi, Bo He, Bing Pian.

* QIONG YU GAO - 琼玉膏 - Precious Jade Syrup, Beautiful Jade Paste

ACTIONS - Enriches Yin. Moistens the Lungs. Augments Qi. Tonifies the Spleen

SYNDROMES - Lung Qi and Yin Deficiency. Lung Yin and Spleen Qi Deficiency. Lung and Kidney Yin Deficiency

CLINICAL MANIFESTATIONS - Dry cough with little sputum. Dry throat. Hemoptysis. Muscle wasting. Emaciation. Dizziness. Tinnitus. Fatigue. Weakness. Shortness of breath. Malar flush. Spontaneous sweating. Weak lower extremities.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with soft stools or bloating after eating. If signs of External invasion are present, discontinue until those signs have been resolved.

NOTES - This formula is primarily designed to treat Yin Deficiency.

HERBS AND ACTIONS

-Ren Shen - Tonifies Lung Qi.
-Sheng Di Huang - Nourishes Yin, generates fluids, increases saliva and treats wasting and thirsting.
-Fu Ling - Strengthens the Spleen and transforms Phlegm.

TREATS

Cough. Diabetes. Insomnia. Laryngeal tuberculosis. Pharyngeal tuberculosis. Chronic laryngitis. Immune system deficiency. Weakness. Dyspnea. Pulmonary tuberculosis. Aphonia. Dry throat. Chronic bronchitis. Bronchiectasis. Dermatitis. Tinnitus. Fatigue.

* ZHI TONG SHENG JI POWDER

Zhi Tong Sheng Ji is indicated for leg ulcers, venous leg ulcers, arterial ulcers, and diabetic foot ulcers. Leg ulcers caused by vasculitis, vasculopathy, necrobiosis lipoidica, pyoderma gangrenosum, malignancy, and hypertension.

Herbs - San Qi, Xue Jie, Ming Fan, Ku Fan, Bai Ji, Ruxiang, Mo Yao, Song Xiang, Er Cha.

1.3.3.34 RT-TCM-34

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_34

Anti-Wart Powder, Bi Yan Pian, Hair Growth-TCM, Houpo Mahuang Tang, Mingjing Granule, Sacroiliitis-TCM, Tiannianyin, Xin Yi San,
Yi Gan San

Recordings Updated in June 2025

* ANTI-WART POWDER (Dr. Joel Penner, americandragon.com)

ACTIONS - Eliminates filiform warts

SYNDROMES - Filiform warts

CLINICAL MANIFESTATIONS - Filiform warts

NOTES - Tear off the warts when they feel like they are coming loose.

HERBS AND ACTIONS

-Hua Rui Shi - Stops bleeding, invigorates the Blood and disperses Blood Stasis.
-Procaine Powder - Local anesthetic.
-Bing Pian - Clears Heat, alleviates pain, dissipates nodules and alleviates itching.

TREATS

Filiform warts.

* BI YAN PIAN - 鼻炎片 - Cool Sinus Teapills, Nose Inflammation Pills, Nose Inflammation Tablets, Nasal Inflammation pills

Disperses Wind, Clears Heat, Expels Toxic-Heat, Transforms Phlegm, Unblocks the Nose.

Wind Heat obstructing the nasal passages and congealing the nasal fluids into Phlegm Heat.

Presenting with nasal congestion, swollen and inflamed mucus membranes, watery or thick yellow or purulent and malodorous nasal mucus, sneezing, reduction or loss of sense of smell, nasal voice, sinus congestion and pain, frontal or sinus headache, dizziness, red itchy eyes, excessive tearing.

-Cang Er Zi, Xin Yi, Bai Zhi and Bo He "release the exterior", decongest the head, dry phlegm, and alleviate headache.

-Jie Geng a phlegm-resolving herb which guides the formula upward.

-Zhi Mu a heat-clearing, fire-reducing herb which soothes and moistens hot, irritated membranes.

-Wu Wei Zi an astringent herb which restrains excessive secretions.

-Jing Jie a surface-releasing herb which opens the nasal passages and alleviates itching.

-Lian Qiao a heat/toxin-eliminating herb which alleviates redness and swelling.

-Fang Feng a surface-releasing herb which alleviates head pain and congestion.

Allergic Rhinitis, Acute and Chronic Rhinitis, Perennial Rhinitis, Acute and Chronic Sinusitis, Post-Nasal Drip, Upper Respiratory Tract Infection, Common Cold, Influenza.

* HAIR GROWTH

Sheng Di Huang, Shu Di Huang, Dang Gui, Mo Han Lian, Ce Bai Ye, Hei Zhi Ma, He Shou Wu

* HOUPO MAHUANG TANG - 厚樸大黃湯

Hou Po, Ma Huang, Gan Jiang, Xing Ren, Shi Gao, Ban Xia, Xi Xin, Xiao Mai, Wu Wei Zi

Post-influenza cough with expectoration of excessive sputum and throat disorder.

* MINGJING GRANULE

Huang Qi, Dan Shen, Gou Qi Zi, Mo Han Lian, Pu Huang, Da Ji

Neovascular age-related macular degeneration.

* SACROILIITIS-TCM

Tian Ma, Du Zhong, Niu Xi, Chuan Xiong, Rou Cong Rong

Sacroiliitis is inflammation of the sacroiliac joint, which connects the lower spine to the hip bone. It can cause pain in the lower back, buttocks, and legs. It may be caused by injury, infection, or autoimmune disorders.

* TIANNIANYIN FORMULA

He Shou Wu, Niu Xi, Fu Ling, Dan Shen, Yin Yang Huo

Anti-aging effects. Can improve the immune function of aged males by preventing atropy of spleen and facilitating the reproductive activity of lymphocytes. Testosterone boost. Can can increase cell proliferating nuclear antigen expression and decrease apoptotic index in anterior pituitary cells. Regulatory effects on blood lipid and its metabolic products.

* XIN YI SAN - 辛夷散 - Magnolia Flower Formula

ACTIONS - Expels Wind-Cold, Unblocks the nasal passages

SYNDROMES - Wind-Cold with sinus congestion or rhinitis

CLINICAL MANIFESTATIONS - Nasal congestion and pain, Persistent copious nasal discharge, Loss of sense of smell, Runny nose, Difficulty breathing, Headache.

HERBS AND ACTIONS

-Xin Yi Hua - Expels Wind-Cold and unblocks nasal passages. With Xi Xin, lifts and spreads the clear Qi while unblocking the nasal orifices to treat headache and sinus distention, nasal congestion and thick nasal discharge due to Wind-Cold. With Bai Zhi and Xi Xin, improves the efficacy of Xin Yi. With Bai Zhi and Fang Feng, for nasal obstruction with clear nasal discharge due to Wind-Cold.

-Chuan Xiong - Activates Blood, regulates Qi, expels Wind-Cold and alleviates pain especially headaches. With Qiang Huo and Gao Ben, for Wind-Damp lateral headache. With Xi Xin, for Wind-Cold headaches and Shao Yin Cold headaches. With Xi Xin and Fang Feng, for Wind-Cold Headaches. With Gao Ben, for severe headache without Interior Fire.

-Mu Tong - Promotes urination.

-Xi Xin - Releases exterior Wind and Cold, warms the Lungs, transforms Phlegm, alleviates pain, relieves toothache and disperses and unblocks the Qi of the nasal orifices. With Chuan Xiong, for Wind-Cold headache, toothache and Bi pain. With Bai Zhi, for Wind-Cold toothache. With Qiang Huo and Fang Feng for Wind-Cold.

-Fang Feng - Releases the exterior. disperses Cold, expels Wind-Cold-Dampness and alleviates pain. With Qiang Huo, for Wind-Dampness.

-Qiang Huo - Releases the Exterior. disperses Cold. expels Wind-Cold-Dampness, alleviates pain and guides Qi to the Tai Yang and Du Channels. With Chuan Xiong, for

headaches and generalized body aches and pains associated with the common cold. With Fang Feng for pain due to External Wind-Dampness. With Bai Zhi, for headache. With Fang Feng, Bai Zhi and Xi Xin, for Wind-Cold with aversion to Cold, fever, headaches and muscle aches. With Fang Feng, Gao Ben and Chuan Xiong, for Wind-Damp headache.

-Gao Ben - Expels Wind-Cold, alleviates pain and dispels Wind-Dampness. With Xi Xin, for Wind-Cold-Damp headache, vertex headaches, stiff neck and toothaches. With Chuan Xiong and Bai Zhi, accentuates pain relieving effects and are often used together for headaches. With Qiang Huo, for headache and stiffness of the nape of the neck due to Wind-Dampness in the Du channel. With Qiang Huo and Fang Feng, for External Wind-Cold-Dampness. With Chuan Xiong and Xi Xin, for headache due to Cold and Dampness.

-Sheng Ma - Releases the exterior, clears Heat, relieves toxicity and raises the Yang. With Bai Zhi for Yang Ming headache.

-Bai Zhi - Expels Wind-Cold, alleviates pain and headache, expels Dampness, alleviates discharge and opens nasal passages. With Gao Ben, for Wind-Cold induced headaches, especially those at the vertex. With Xi Xin, for Wind-Cold induced headaches, sinus headaches, orbital headaches and toothache aggravated by cold air. With Fang Feng and Qiang Huo for Wind-Cold with headache and stuffy nose. With Gan Cao, for stomachache. With Chuan Xiong, for headache. With Qiang Huo, for Wind-Cold Dampness causing fever, chills and headaches.

-Gan Cao - Resolves Phlegm, stops cough, alleviates pain and moderates and harmonizes the properties of other herbs.

TREATS

Common cold, Stuffy nose, Nasal congestion, Chronic rhinitis, Sinusitis, Rhinitis, Nasal polyps, Nasal empyema, Allergic rhinitis, Allergy, Sinus congestion, Sinus headache.

* YI GAN SAN - 抑肝散 - Restrain the Liver Powder, Bupleurum Formula

ACTIONS - Calms the Liver, Regulates the Liver Qi and Blood, Relieves spasms, Dispels Heat, Strengthens the Spleen

SYNDROMES - Liver Channel Deficiency Heat in children, Liver Blood Deficiency with Liver Heat in children, Liver Wind

CLINICAL MANIFESTATIONS - Muscle spasms, Feverishness, Bruxism, Palpitations, Anxiety, Fever and chills, Alternating chills and fever, Spitting of sputum or saliva, Abdominal distention, Reduced appetite, Restless sleep, Nervousness, Rigidity and pain of the neck and head, Opisthotonos, Numbness of the limbs, Vertigo, Dizziness,

Hemiplegia, Irritability, Insomnia, Clenching or grinding of teeth, Easily frightened, Restlessness.

NOTES - Originally used for Liver Blood Deficiency with Liver Heat in infants, today it is used to treat adults who lead stressful lifestyles, with insomnia.

HERBS AND ACTIONS

-Bai Zhu - Tonifies the Spleen, tonifies Qi and dries Dampness.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Dang Gui - Tonifies, harmonizes and invigorates the Blood and regulates menses.

-Chuan Xiong - Activates the Blood and regulates Qi. With Dang Gui, for Blood Deficiency.

-Gou Teng - Extinguishes Wind, stops spasms, drains Liver Heat and pacifies Liver Yang.

-Chai Hu - Resolves Shao Yang disorders, reduces fever, spreads Liver Qi, relieves Stagnation and raises Yang Qi.

-Gan Cao - Moderates and harmonizes the effects of the other herbs.

TREATS

Seizure disorders, Hysteria, Night seizures, Hyperthyroidism, Night terrors, Hypertension, Neurosis, Menopausal disturbance, Indigestion, Hemiplegia, Visual hallucinations, Epilepsy, Neurasthenia, Climacteric disorders, Excitability, Anxiety, Infantile night crying, Insomnia, Palpitations, Stroke, Aphasia.

1.3.3.35 RT-TCM-35

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_35

Foot Clavus-TCM, Fumanjian, Jia Wei Cang Er Pian, Jia Wei Xin Yi San, Liang Ge San, Plantar Fasciitis-TCM, Qishe Tablet, Tuo Li Xiao Du San, Xiaosheng Powder

Recordings Updated in June 2025

* FOOT CLAVUS-TCM

A TCM formula to treat foot clavus, also known as corn.

Herbs - Ya Dan Zi , Danshen, Ai Ye, Ding Xiang, Di Gu Pi, Ban Xia

* FUMANJIAN

Fumanjian (FMJ) treats dementia by promoting qi circulation, alleviating depression, eliminating turbidity, cultivating positivity, and dispelling evil spirits.

Herbs - Shengdihuang, Maidong, Baishao, Shichangpu, Shihu, Mudanpi, Fuling, Chenpi, Mutong, Zhimu

* JIA WEI CANG ER PIAN - Xanthium Nasal Formula

Xanthium Nasal Formula (Jia Wei Cang Er Pian) treats severe nasal congestion with yellow, green, or creamy sinus discharge and is commonly used for phlegm-heat patterns. Unblock the nasal passages. Release the exterior, dispel wind-damp, dry and resolve phlegmy discharge. The formula can relieve headache pain and open all of the sensory orifices to clear the head. Xanthium Nasal Formula (Jia Wei Cang Er Pian) is the formula of choice for phlegm-heat pattern when the discharge is yellow or creamy or green. In this pattern there must be phlegm or dampness because the formula is drying.

Xanthium Nasal Formula
1. Clears heat
2. Moves and cools blood
3. Transforms phlegm
4. Dries dampness
5. Frees the nasal passages

Herbs - Huang Qin, Chi Shao, Cang Er Zi, Bai Zhi, Xin Yi Hua, Bo He, Ku Ding Cha, Ge Gen

* JIA WEI XIN YI SAN - Xanthium & Magnolia Formula

Xanthium & Magnolia Formula (Jia Wei Xin Yi San) treats severe nasal congestion with copious clear nasal discharge and/or post-nasal drip. This formula is commonly used as a symptomatic treatment for seasonal allergies. Xanthium & Magnolia Formula (Jia Wei Xin Yi San) is appropriate when the pattern is wind-cold or wind-heat with copious clear discharge. In this pattern there must be phlegm or dampness because the formula is

drying.

Xanthium & Magnolia Formula
1. Dispels wind
2. Dries dampness
3. Frees the nasal passages

Herbs - Bai Zhi, Cang Er Zi, Xin Yi Hua, Chi Shao, Gao Ben, Chuan Xiong, Tong Cao, Ge Gen, Gan Cao, Cha Ye

* LIANG GE SAN - 凉膈散 - Cool the Diaphragm Powder, Forsythia and Rhubarb Formula, The Diaphragm Cooling Powder

ACTIONS - Drains Fire. Unblocks the bowels by Clearing the Upper Jiao and Draining the Middle and Lower Jiaos

SYNDROMES - Colon Heat. Heart Fire Flaring Up. Heat Stagnation (unformed Heat in the Upper Jiao with Heat Accumulation in the Middle Jiao). Constipation with Heat in the Upper Jiao. Qi Stage Gallbladder Heat

CLINICAL MANIFESTATIONS - Sensation of Heat and irritability in the chest, diaphragm and abdomen. Delirious speech (severe). Hemoptysis. Thirst. Flushed face. Red or scorched lips. Tongue sores. Sore throat. Swollen tongue. Red eyes. Epistaxis. Constipation. Toothache. Alternating chills and fever. Hematemesis. Fever. Bitter taste in mouth. Red urine. Dry, chapped lips. Dark, scanty urine. Restlessness. Vomiting. Red mouth or ulcers on the mouth. Hypochondriac pain. Rashes. Insomnia. Mania.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Weak patients. Contraindicated during pregnancy.

HERBS AND ACTIONS

-Da Huang - Drains Heat and Fire, purges accumulations, transforms Dampness, promotes urination, Invigorates the Blood, dispels Blood Stasis and reduces Fire toxicity. With Mang Xiao, eliminates obstruction in the Intestines and treats abscess, swellings and toxic sores. With Mang Xiao and Gan Cao (Tiao Wei Cheng Qi Tang), drains Yang Ming Heat. With Huang Qin, Zhi Zi and Lian Qiao, for strong pathogenic Heat in the Upper and Middle Jiaos.

-Mang Xiao - Softens hardness, purges accumulations, clears Heat, drains Fire, reduces swelling and eliminates Stagnation. With Da Huang, for constipation due to Colon Heat.

-Gan Cao - Clears Heat, relieves Fire toxicity and harmonizes.

-Huang Qin - Drains Fire, clears Heat, dries Dampness, detoxifies and clears Lung and Liver Heat. With Zhi Zi, powerfully clears and drains lurking Heat from the Lungs with fever, fullness in the chest, cough with yellow sputum and epistaxis or hematemesis, Clears Damp-Heat and jaundice, treats sores due to Heat toxin and irregular vaginal bleeding due to Liver Fire.

-Zhi Zi - Clears Heat from all three Jiaos through the urine and resolves Dampness.

-Lian Qiao - Clears Lung Heat, relieves toxicity, reduces abscesses and dissipates clumps.

-Bo He - Helps release Upper Jiao Heat, benefits the head and throat and relieves Liver Qi Stagnation.

-Dan Zhu Ye -Clears Heat from the Lung, Stomach and Heart, promotes urination and clears Damp-Heat.

TREATS

Childhood convulsions. Patch-like rashes. Pox with collapsed sores. Skin disorders. Upper respiratory tract infection. Tonsillitis. Meningitis. Encephalitis B. Hypertension. Cholecystitis. Cholelithiasis. Furuncles. Acute conjunctivitis. Pediatric pneumonia. Some gynecological disorders. Malnutrition. Infections. Cough. Pertussis. Influenza. Herpetic pharyngitis. Herpes labialis. Epistaxis. Acute nephritis. Abdominal Heat. Tracheitis. Hematuria. Fever. Dysphagia. Reflux esophagitis. Glossitis. Urinary tract infections. Neck pain. Red eyes. Sore throat. Hemoptysis. Constipation. Malaria. Acute pancreatitis. Emotional upset. Epidemic meningitis. Measles. Thrush. Stomatitis. Chronic Laryngitis. Psychosis. Furuncles on head. Diphtheria. Acute bronchitis. Lobar pneumonia. Periodontitis. Suppurative tonsillitis. Bronchiectasis with or without hemoptysis. Common cold. Infectious parotitis. Candidiasis. Gingivitis. Diarrhea. Insomnia. Pneumonia. Oliguria. Jaundice. Hemorrhoids. Esophageal cancer. Hematemesis. Bad breath. Toothache. Facial pain. Thrush associated with AIDS/HIV. Sepsis.

* PLANTAR FASCIITIS-TCM

Herbs - Bai Zhi, Dang Gui, Chuanxiong, Danshen, Renshen, Hong Hua

Treats plantar fasciitis.

* QISHE TABLET

Qishe Tablet is a chinese herbal medicine for chronic neck pain due to cervical degenerative disc disease.

Herbs - Huangqi, Dangshen, Sanqi, Chuanxiong, Zhimu, Lujiao

* TUO LI XIAO DU SAN

Tuo Li Xiao Du San (TLXDS) belongs to the category of formulas that clear internal abscesses and sores.

Its main actions are:

1) Draws out toxicity

2) Expels pus from the interior

Herbs - Huang Qi, Dang Shen, Bai Zhu, Gan Cao, Fu Ling, Bai Zhi, Dang Gui, Bai Shao, Chuan Xiong, Jin Yin Hua, Jie Geng

Treats refractory wounds, diabetic wounds.

* XIAOSHENG POWDER

Xiaosheng Powder may reduce or inhibit the intensity of inflammatory response and the release of pro-inflammatory cytokines through immune regulation, so as to affect the apoptosis of ocular surface epithelial cells, lymphocytes, and lacrimal glands. And it prevents the apoptosis of goblet cells to exert its pharmacological effects, inhibiting or delaying the formation of dry eye.

Xiaosheng Powder soothes the liver, nourishes yin and moistens the eyes, so as to rescue liver and Qi function and, promote body fluids to nourish the eyes.

Herbs - Di Huang, Dang Shen, Mai Dong, Chai Hu, Bo He, Dang Gui, Bai Shao, Wuweizi

Treats - Dry Eye disease.

1.3.3.36 RT-TCM-36

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_36

Anti-Cancer Tumor-TCM, Guan Jie Yan Wan, Lianhua Qingke, Nao Xin Tong, Tian Qi Du Zhong Wan, Tung Shueh Pill, Tuo Li Xiao Du San-refined, Wu Bi Shan Yao Wan, Xianling Gubao Capsule

Recordings Updated in June 2025

* ANTI-CANCER TUMOR-TCM

Chinese herbal formula contains three Chinese medical botanical drugs, Huang Lian, Huang Qin, BaiWei and Polyinosinic-polycytidylic acid (sodium). The Formula targets three important processes, tumor maintenance (tumor stem cells), progression, and metastasis, and influences the response of tumors to host immunosuppression, for the potentially effective treatment of cancer patients.

Polyinosinic-polycytidylic acid (sodium) is a synthetic analog of double-stranded RNA and an agonist of toll-like receptor 3 (TLR3) and retinoic acid inducible gene I (RIG-I)-like receptors (RIG-I and MDA5). Polyinosinic-polycytidylic acid sodium can be used as a vaccine adjuvant to enhance innate and adaptive immune responses, and to alter the tumor microenvironment. Polyinosinic-polycytidylic acid sodium can directly trigger cancer cells to undergo apoptosis.

* GUAN JIE YAN WAN - 关节炎片 - Joint Inflammation Teapills, Plum Flower - Joint Obstruction Teapills, Mulberry Leaves & Job's Tears

Joint Inflammation Pills are a modern prescription formulated to treat Damp Heat Bi syndrome primarily affecting the joints of the lower extremities. Although half of the prescription is comprised of warm herbs, the overall effect of the formula is cooling. Due to the presence of significant Dampness in this clinical picture, warm mobilizing herbs are particularly useful, as Dampness is fundamentally a Yin pathogen. Cang zhu, Hai tong pi, Gui zhi, Wu zhu yu, Du huo, and Sheng jiang function to warm, open and circulate the channels and collaterals while eliminating Dampness. The bland, bitter and cold Dampness-clearing herbs Yi yi ren and Han fang ji make up 34% of the prescription, while the remaining cool Dampness draining herbs Niu xi, Qin jiao, Xiang jia pi and Huang qin assist in clearing Heat and reducing Dampness and swelling.

Contraindicated during pregnancy. Contraindicated during early stages of acute illness such as cold and flu, and during acute infections.

* LIANHUA QINGKE

Lianhua Qingke LHQK is composed of Mahuang, Lian Qiao, Huang Qin, Sang Ye, Xing Ren, Qian Hu, Ban Xia, Chen Pi, Zhe Bei Mu, Niu Bang Zi, Jin Yin Hua, Da Huang, Jie Geng, Gan Cao, Shi Gao

Lianhua Qingke (LHQK) is used for treating acute tracheobronchitis. Effective managing airway mucus hypersecretion in acute exacerbation of chronic obstructive pulmonary disease. Targets both inflammation and excessive mucus production to effectively alleviate airway obstruction.

* NAO XIN TONG

Reinforcing Qi and promoting blood circulation, removing blood stasis and dredging collaterals.

NXT can reduce blood viscosity and normalize blood pressure and it can prevent and treat the headache, dizziness, cervical spondylopathy, weakness in mental energy caused by hyperlipemia, arteriosclerosis and blood supply insufficiency.

Reported side effects include gastrointestinal discomfort, dry mouth and bitter taste in the mouth, dizziness, headache, toothache. Do not use during pregnancy.

Herbs - Huangqi, Danggui, Chishao, Chuanxiong, Honghua, Taoren, Danshen, Niuxi, Jixueteng, Guizhi, Sangzhi, Moyao, Ruxiang, Quan Xie, Dilong, Shui Zhi

Cardiovascular disease. Cerebrovascular disease. Atherosclerosis. Diabetes Type 2. Hyperglycemia. Diabetic nephropathy. Hyperlipidemia. Lipid metabolism. Glucose metabolism. Insulin sensitivity. Alzheimer's disease. Hemiplegia due to stroke. Numb extremities. Stiff tongue and retardation in speech, Palpitation. Short breath due to chest paralysis. Chest distress. Chest pain due to coronary heart disease. Deviated mouth and eyes. Involuntary drooling. Dementia. Urinary and fecal incontinence.

* TIAN QI DU ZHONG WAN - 田七杜仲丸 - Panax Notoginseng Eucommia Ulmoides Pills

Nourishes Kidney Yin. Dispels Wind. Eliminates Damp. Unblocks Channels. Tonifies Qi. Invigorate Blood

In addition to treating low back issues, Tian Qi Du Zhong Wan is effective in treating muscle ache and spasm anywhere in the body. This prescription is an excellent complement to acupuncture treatment and can be used to treat a wide variety of sports injuries where muscle ache is the primary complaint.

The prescription includes San qi, Du zhong, Rou gui and Ru xiang are included to move the blood and dispel blood stasis in the muscles of the low back. According to TCM theory, sub-acute and chronic muscle ache is referred to as Qi and Blood stagnation due to Qi and Blood deficiency. Accordingly, Ren shen, Du zhong and Sang ji sheng are found in the formula to nourish Qi, Blood and Yang in order to eliminate stagnation through tonifying the underlying deficiencies. The spicy warmth of Du huo dispels Wind,

Cold, and Dampness, relieves obstruction, and functions as a guiding herb to the low back. Finally, Wu wei zi tonifies the Kidneys, secures Essence, generates fluids, and strengthens the low back.

Chronic dull aching, stiffness and/or weakness in the lower back and knees that may be interspersed with occasional flare-ups of sharp pain associated with overwork and strain.

* TUNG SHUEH PILL

This formula is used for joint and muscle pain - basically pain that in modern terms is described as arthritis or rheumatism. It is also good for acute and chronic injuries.

Herbs

-Jiang Huang is an anti-inflammatory and is especially helpful for painful shoulders.

-Qian Nian Jian strengthens the tendons and bones. It has a strong tonifying action and is also used for pain and swelling due to traumatic injuries. In China it is widely used for treating the elderly.

-Mu Gua is one of the more effective herbs for relaxing the tendons. It is beneficial for joint pain due to changes in weather and for pain in the lower extremities.

-Bu Gu Zhi is helpful for painful or weak lower back and extremities.

-Gui Ban strengthens the bones and is said to be good for weakness of the lower back and knees.

-Dang Gui used for numbness and pain in the extremities and painful joints.

-Rou Gui is said to disperse cold in the body and alleviate pain. It is used for joint pain caused by wet and cold weather changes and back pain.

-Ru Xiang promotes the circulation of energy in the body. It alleviates pain and is used for joint pain that moves in the body and pain that is affected by damp weather.

-Mo Yao circulates the blood and alleviates joint pain.

-Mu Xiang is used to relieve stagnation.

-Dong Gua Ren is useful for circulating fluids in the body. In Chinese medicine fluid stagnation creates joint pain that feels heavy, distended or swollen.

-Ba Ji Tian is useful for back, leg, and joint pain, as well as, muscle spasms and

cramps.

-Du Zhong is good for low back pain, it is also combined with Xu Duan for fractured or broken bones to promote the healing of bones.

-Yan Hu Suo has an excellent ability to activate the Qi and Blood circulation in the body. Corydalis can treat pain in the upper and lower extremities and also be used for traumatic injuries.

-Xu Duan or "restore what is broken." It is good for sore and painful lower back and knees, stiffness in the joints and weakness in the legs. It is said to promote the growth of bones when used for fractures.

-Niu Xi is good for the tendons, bones, and joints. It is often used with Du Zhong for pain and weakness of the lower back and extremities. It is commonly used for sports injuries.

-Hong Hua alleviates pain. It is used to disperse blood stagnation and open the channels.

* TUO LI XIAO DU SAN-refined

Tuo Li Xiao Du San (TLXDS) is a refined Chinese medicine formula consisting of four herbs: Danggui (Radix Angelica sinensis), Huangqi (Radix Astragali),Baizhi (Angelica dahurica),and Zaojiaoci (thorns of Gleditsia sinensis)

Treats - Impaired wound healing in diabetes. Refractory wounds.

* WU BI SHAN YAO WAN - 無比山藥丸 - Incomparable Dioscorea Pill

ACTIONS - Nourishes the Yin. Assists the Yang. Augments the Qi. Strengthens the Kidneys

SYNDROMES - Kidney Deficiency

CLINICAL MANIFESTATIONS - Soreness or pain of the waist and back. Dizziness. Tinnitus. Frequent, clear urination. Dribbling urination that starts and stops.

HERBS AND ACTIONS

-Shan Yao - Tonifies Qi, tonifies the Spleen ,nourishes the Stomach Yin, stops diarrhea, tonifies the Kidney Yin and astringes Jing.
With Shan Zhu Yu and Tu Si Zi, for leukorrhea due to Spleen and Kidney Deficiencies.

-Rou Cong Rong - Tonifies the Kidneys, strengthens the Yang, benefits Jing and marrow

and warms the Womb. With Shan Zhu Yu, Tu Si Zi and Wu Wei Zi, for Impotence, spermatorrhea, and weakness in the lower back and lower extremities from severely Deficient Kidneys. With Du Zhong, for high blood pressure. With Ba Ji Tian, tonifies Yang without injuring Yin.

-Wu Wei Zi - Tonifies the Kidneys, astringes Jing and stops diarrhea and spermatorrhea.

-Tu Si Zi - Tonifies the Kidneys and Spleen, strengthens Yang, nourishes Yin, astringes Jing and urine, benefits marrow and astringes diarrhea. With Du Zhong, enriches and tonifies the Kidneys and Liver, astringes Jing, nourishes Kidney Yin , brightens the eyes and encourages the movement of Primal Yang to treat spermatorrhea, premature ejaculation and lower back pain from Kidney Deficiency.

-Du Zhong - Tonifies Yang, tonifies the Kidneys and Liver and strengthens the sinews and bones. With Shan Zhu Yu and Tu Si Zi, for impotence and frequent urination due to Deficiency Cold of the Kidneys.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin, strengthens the sinews and bones and benefits the joints. With Du Zhong, for low back and extremity pain and weakness due to Bi pain or Kidney Deficiency. With Sheng Di Huang, powerfully clears Deficiency Fire Blazing Upward with pain and swelling of the gums, epistaxis, hematemesis and other hemorrhage in the upper body.

-Ze Xie - Promotes urination, drains Kidney Fire, leaches out Dampness, and settles ministerial Fire in the Kidneys by draining Damp-Heat from the lower Jiao.

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin, generates fluids, increases saliva and treats wasting and thirsting.

-Shan Zhu Yu - Tonifies Liver and Kidney Yin, strengthens Kidney Yang, stabilizes the Kidneys, astringes Jing and Body Fluids, stops excessive sweating and supports that which has collapsed. With Wu Wei Zi, for Spermatorrhea, abnormal sweating, palpitations and shortness of breath due to Yin and Yang Deficiencies of the Liver and Kidneys.

-Fu Ling - Dispels Dampness, promotes water metabolism, nourishes the Heart and calms the Shen.

-Ba Ji Tian - Tonifies Kidneys and strengthens Yang. With Tu Si Zi and Rou Cong Rong, for impotence, spermatorrhea and premature ejaculation due to Kidney Yang Deficiency. With Niu Xi, for impotence.

-Chi Shi Zhi - Astringes the Intestines and stops diarrhea.

TREATS

Hematuria. Chronic nephritis. Urolithiasis. Turbid urine. Strangury.

* XIANLING GUBAO CAPSULE

Xianling Gubao Capsule (XLGBC), is often used to treat osteoarthritis (OA), osteoporosis, fractures, and other musculoskeleton disorders.

Its main components are Yinyanghuo, Xuduan, Buguzhi, Danshen, Zhimu, Dihuang, among which the Yinyanghuo(Herba Epimedii), Xuduan(Radix Dipsaci), Buguzhi(Fructus Psoraleae) invigorate the kidney, strengthen the muscles and strengthen the bones, Danshen(Radix Salviae Miltiorrhiae) activate blood circulation, remove blood stasis, and stop pain, Zhimu(Rhizoma Anemarrhenae) and Dihuang(Radix Rehmanniae) cool the blood, enrich the blood, and nourish kidney yin, has the effect of nourishing liver and kidney, activating blood circulation and clearing collaterals, strengthening tendons and strengthening bones, has good overall security.

1.3.3.37 RT-TCM-37

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_37

Cardiospasm-TCM, Dry Skin -1, PM2.5-TCM, Pu Ji Xiao Du Yin modified for foot sole pain, Qiangxin Recipe, Qing'e Formula modified, Wei Fu Chun Tablet, Xiao Huo Luo Dan, Yang Xue Run Fu Tang Yi Hao

Recordings Updated in June 2025

* CARDIOSPASM TCM

A herbal medicine for Achalasia or Cardiospasm.

Herbs - Zhi Shi, Zhi Ke, Zhi Qiao

* DRY SKIN #1 (Dr. Joel Penner, americandragon.com)

ACTIONS - Dispels Wind from the face and head. Moistens the skin. Clears Heat. Disperses swelling

SYNDROMES - Wind-Cold and Dryness. Yin Deficiency with Yang Rising

CLINICAL MANIFESTATIONS - Dry skin.

HERBS AND ACTIONS

-Xing Ren - Moistens the Intestines and expels Wind-Cold.

-Tian Hua Fen - Drains Heat, generates Fluids, transforms Phlegm, moistens Lung Dryness, relieves toxicity, expels pus and reduces swelling.

-Hong Zao - Nourishes and cools the Blood.

TREATS - Dry skin.

* PM2.5-TCM

Traditional Chinese medicine formula for improving lung injury induced by fine particles, and the formula is indicated to be used for preventing and treating the fine particle-induced subacute lung injury. Fine particulate matter, also referred to as PM2.5, refers to particulate matter having an aerodynamic diameter of 2.5 μm or less in ambient air. T he organism, and its main chemical components are elemental carbon, organic carbon compounds, sulfates, nitrates, ammonium salts, etc. Air pollution has relevance to the o ccurrence of various diseases such as cardiovascular diseases, diabetes, tumors and st rokes.

The traditional Chinese medicine formula comprises. Sang Ye, Mai Men Dong, Zhi Mu, Sha Shen, Ren Shen

* PU JI XIAO DU YIN Modified for stabbing foot sole pain - 普濟消毒飲 - Universal Benefit Decoction to Eliminate Toxin

Herbs - Huang Qin, Huang Lian, Da Qing Ye, Zhe Bei Mu, San Qi, Lian Qiao, Jiang Can, Xuan Shen, Ban Lan Gen, Gan Cao, Sheng Ma, Ren Shen

TREATS - Stabbing foot sole pain.

* QIANGXIN RECIPE

Qiangxin recipe is used to improve cardiac function, prevent stroke, and strengthen the immune system.

Herbs - Hong Jing Tian, Ling Zhi, Proanthocyanidin

* QING-E FORMULA-MODIFIED

Modified Qing-e Formula protects against UV-induced skin oxidative damage via the activation of Nrf2/ARE defensive pathway. Qing-e Formula-Modified improves skin barrier protection and UV-induced damage. The fornula may increase antioxidant levels and reduce UV-induced lipid peroxidation, thereby protecting from UV-induced oxidative damage by promoting Nrf2 transcription into the nucleus to mediate the expression of antioxidant genes. Qing-e Formula-Modified could attenuate UV-induced oxidative stress damage in the skin, and its mechanism of action may be related to the activation and nuclear translocation of Nrf2. MQEF has promising applications in protecting skin cells from UV radiation-induced damage and premature skin aging.

Herbs - Danshen, Buguzhi, Du Zhong

* WEI FU CHUN TABLET

The combination of specific herbs helps get gastrointestinal functions back to normal. Pharmacological tests show the medicine can raise the immunity, improve the functions of the whole body and inhibit pylorus spirillum. Clinical experiments prove the medicine is indicated for chronic superficial gastritis, atrophied gastritis, intestinal metaplasia or untypical epithelial hyperplasia of gastric mucosa. It can relieve the clinical symptoms of functional indigestion, poor appetite, abdominal distention and stomach ache, weakness and fatigue, etc. It can also be used for adjuvant treatment of gastric carcinoma after chemotherapy or radiotherapy. Obviously effective in the chronic superficial gastritis, atrophic gastritis, secret anguish upper abdomen, distention after meals, belching etc.

Herbs - Hong Shen, Zhi Ke, Xiang Cha Cai

* XIAO HUO LUO DAN - 小活络丹 - Minor Invigorate the Channels Special Pill, Huo Luo Dan, Invigorate the Collaterals Special Pill Myrrh and Aconite Formula, Minor Pills for Activating Circulation in Collateral Channels

ACTIONS - Dispels Wind, Eliminates Dampness, Transforms Phlegm, Invigorates the Blood, Unblocks the collaterals, Alleviates pain, Warms the channels and collaterals

SYNDROMES - Obstruction of the channels by Wind-Cold-Dampness, Blood Stasis and Phlegm, Stubborn Bi, Windstroke

CLINICAL MANIFESTATIONS - Chronic pain, weakness and numbness (especially in the lower extremities) due to Windstroke, Muscle spasms, Cramps, Heaviness and pain in the lower back and legs, Fixed or migrating pain in the bones in the bones and joints with reduced range of motion, Long-term numbness or paralysis in the hands and feet.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Because this formula is quite harsh, warming and drying, it should only be prescribed for those with a relatively

strong constitution. Contraindicated for those with Yin Deficiency. Contraindicated during pregnancy.

HERBS AND ACTIONS

-Cao Wu - Disperses Cold, scours out Wind, overcomes Dampness and stops pain.

-Chuan Wu - Expels Wind-Dampness, disperses Cold, warms and activates channels and stops pain. With Mo Yao, Ru Xiang and Di Long, for Wind-Cold-Dampness or Phlegm- Dampness and Blood Stasis lingering and stagnating in the channels and collaterals.

-Tian Nan Xing - Dries Dampness, expels Phlegm, disperses Wind-Phlegm in the channels, stops spasms, reduces swelling and alleviates pain.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain and reduces swelling. With Di Long and Chuan Wu, for Wind-Stroke with spasms and rigidity and Wind-Damp-Cold-Bi. With Ru Xiang, for Wind-Cold-Damp Bi with numbness throughout the body and unresponsive extremities.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, invigorates the channels and alleviates pain.
With Mo Yao, for Traumatic injury pain.

- Di Long - Drains Heat, settles convulsions, extinguishes Wind, stops spasms and unblocks and promotes movement in the channels and collaterals. With Chuan Wu, Cao Wu and Ru Xiang for Cold Bi. With Chuan Wu and Tian Nan Xing, for Wind-Damp Bi.

TREATS

Windstroke, Hemiplegia after cerebrovascular accident, Osteoarthritis, Peripheral nerve disorders, Periarthritis of the shoulder, Sciatica, Hemiplegia, Cerebral vascular accident, Arthralgia, Hemilateral sweating, Wind-Cold-Damp Bi, Rheumatoid arthritis, Bone spurs, Arthritis, Soft tissue injuries, Post stroke sequelae, Apoplexy, Weakness, Paralysis, Unilateral pain.

* YANG XUE RUN FU TANG YI HAO - Nourish the Blood and Moisten the Skin Decoction #1

ACTIONS - Enriches Yin. Moistens Dryness. Clears Heat. Expels Wind

SYNDROMES - Blood Deficiency

CLINICAL MANIFESTATIONS - Dizziness. Palpitations. Insomnia. Dry skin. Dry hair. Poor memory. Paleness. Fatigue. Scanty periods.

HERBS AND ACTIONS

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Shu Di Huang - Nourishes Jing and Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, moistens the Intestines, unblocks the bowels, reduces swelling, expels pus, generates flesh and alleviates pain. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Huang Qi, for many Blood Deficiency patterns. With Tao Ren and Hong Hua, for symptoms associated with Blood Stasis.

-Huang Qi - Tonifies Qi and Blood Tonifies Wei Qi, stabilizes the Exterior tonifies the Lungs, aids the circulation of moisture downward from the face and generates Body Fluids.

-Mai Men Dong - Moistens the Lungs and Intestines, nourishes Lung and Stomach Yin and generates fluids. With Sheng Di Huang, for Yin Deficiency with Excess Heat. With Tian Men Dong, for Lung and Kidney Yin Deficiency.

-Tian Men Dong - Nourishes the Kidney Yin, clears Lung Heat, sedates Fire, moistens the Lungs, nourishes the Kidneys and generates fluids. With Mai Men Dong, for Yin Deficiency with injured fluids.

-Tao Ren - Dispels Blood Stasis, invigorates Blood circulation and moistens Intestines.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain. With Tao Ren, invigorates the Blood for all types of Blood Stagnation.

-Jing Jie - Releases the Exterior, expels Wind, vents rashes and relieves itching.

-Bai Ji Li - Dispels Wind and stops itching.

-Huang Qin - Clears Heat and dries Dampness.

TREATS

Dry skin. Dry hair.

1.3.3.38 RT-TCM-38

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_38

Dantonic Pill, Die Da Wan, Ji Sui Kang, Jiang Huang Wan, Qing Xin Li Ge Tang, San Wu Bei Ji Wan, Xiang Sha Ping Wei San, Yinzhihuang Granule, Zhi Shi Dao Zhi Wan

Recordings Updated in June 2025

* DANTONIC PILL

Dantonic or Compound Danshen Dripping Pills (CDDP) is a well-known traditional Chinese medicine used for the treatment of myocardial ischemic diseases, such as angina pectoris (AP), myocardial infarction, and sudden death. Dantonic Pill, also known as the "Cardiotonic Pill," is a botanical drug consists of extracts of Danshen (Radix Salviae Miltiorrhizae) and Sanqi (Radix Notoginseng) with borneol (Bingpian) in a capsule form. The drug is currently approved in 26 countries outside the USA for the treatment and prevention of chronic stable angina pectoris and other cardiovascular disease related conditions.

* DIE DA WAN - 跌打丸 - Trauma Pill

ACTIONS - Invigorates the Blood. Transforms Blood Stasis. Harmonizes the Nutritive Qi. Reduces swelling. Alleviates pain

SYNDROMES - Blood Stasis due to traumatic injury

CLINICAL MANIFESTATIONS - Pain. Bruising. Pain with a fixed location. Swelling. Distended aches.

NOTES - This formula moves Wei Qi to the surface of the body.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, disperses Cold, stops pain due to Blood Stasis, reduces swelling, expels pus, generates flesh and alleviates pain. With Ru Xiang, Mo Yao and Zi Ran Tong, for strains and fractures. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for Wind-Damp Invasion blocking the Blood vessels causing pain, numbness, and paralysis.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews,

invigorates the channels, reduces swelling, generates flesh and alleviates pain. With Mo Yao, for traumatic injury pain, blood Stasis obstructing the channels with joint pain and Wind-Cold-Damp Bi with numbness throughout the body and unresponsive extremities.

-Mo Yao - Invigorates the Blood, dispels Blood Stasis, alleviates pain and reduces swelling.

-Xue Jie - Invigorates the Blood, dispels Blood Stasis, stops bleeding and alleviates pain. With Ru Xiang and Mo Yao, for trauma-induced pain, swelling or hemorrhage, especially in the chest and abdomen.

-Ma Huang - Warms and disperses Cold pathogens.

-Zi Ran Tong - Dispels Blood Stasis, relieves pain and promotes healing of bones and sinews. With Ru Xiang and Mo Yao, for for pain and swelling due to traumatic injury, especially for fractures.

TREATS

Traumatic injury. Painful obstruction. Hip internal rotation injuries.

* JI SUI KANG - 脊髓康

Jisuikang is a Chinese herbal formula used for neurological function after spinal cord injury. Jisuikang can upregulate BDNF and NGF expression for a prolonged period after spinal cord injury and promote repair of acute spinal cord injury, with its effect being similar to prednisolone.

Herbs - Huang Qi, Dang Gui, Chi Shao, Di Long, Chuan Xiong, Tao Ren, Hong Hua

* JIANG HUANG WAN - 姜黄片 - Curcuma Longa Pill

ACTIONS - Clears Heat. Drains Dampness. Invigorates Blood. Eliminates Blood Stasis. Promotes the movement of Qi. Expels Wind. Opens the channels and collaterals. Alleviates pain

SYNDROMES - Liver and Kidney Deficiency with Heat. Qi and Blood Deficiency with Heat. Wind-Cold-Damp Invasion with Heat

CLINICAL MANIFESTATIONS - Hip pain.

HERBS AND ACTIONS

-Jiang Huang - Invigorates Blood, eliminates Blood Stasis, promotes the movement of

Qi, expels Wind and opens the channels and collaterals to alleviate pain.

-Hu Zhang - Invigorates the Blood, dispels Blood Stasis, unblocks the channels, clears Heat, resolves Dampness and stops pain.

-Nu Zhen Zi - Nourishes and tonifies the Liver and Kidney Yin and clears Deficiency Heat.

-Ru Xiang - Invigorates the Blood, promotes the movement of Qi, relaxes the sinews, invigorates the channels and alleviates pain.

-Huang Qin - Clears Heat and dries Dampness. With Huang Lian, drains pathogenic Heat from the Upper and Middle Jiaos.

-Xia Ku Cao - Clears Liver Fire.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold and reduces the toxicity of other herbs. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis.

-Gui Zhi - Releases the exterior, assists the Yang, adjusts the Ying and Wei, releases the muscle layer and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels.

-Lu Cha - Harmonizes the Stomach, descends Rebellious Stomach Qi, relieves diarrhea and dispels Dampness.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Sheng Jiang, for vomiting and hiccups due to Disharmony of the Stomach Qi.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs.

-Huang Lian - Clears Heat and drains Dampness.

TREATS

Hip internal rotation injuries. Hip pain.

* QING XIN LI GE TANG - 清心利膈汤 - Clear the Heart and Enable the Diaphragm Decoction, Clear the Epigastrium and Benefit the Diaphragm Decoction

ACTIONS - Purges Fire in the Lungs and Stomach. Dispels Heat. Resolves toxicity. Unblocks the stool

SYNDROMES - Lung Heat. Stomach Heat

CLINICAL MANIFESTATIONS - High fever with slight chills. Maybe a slight aversion to Cold. Slight aversion to Wind. Painful red. swollen throat. Maybe small pustules on the tonsils. Phlegm in the throat. Sweating. Headache. Stuffy, runny nose. Dry mouth. Bad breath. Chest congestion and distention. Dysuria with yellow urine. Sores on the tongue or mouth. Irritability. Difficulty swallowing. Thirst with a desire for cold liquids. Constipation. Anxiety. Insistence on cold foods. Cough. Yellow, sticky mucus.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - This formula is intended for short-term use only. Contraindicated during pregnancy. Contraindicated for nursing mothers. Use caution for young children, the debilitated, the elderly and those with loose stools.

HERBS AND ACTIONS

-Zhi Zi - Clears Heat and eliminates irritability. With Huang Lian, Da Huang and Lian Qiao, for irritability and restlessness with high fever due to Toxic Heat and carbuncles and furuncles with or without abscesses and ulcerations. With Huang Lian, Huang Qin and Lian Qiao, for Boils and carbuncles. With Lian Qiao, for Heat entering the Pericardium and Heat remaining in the Heart channel with sores in the mouth, or on the tongue, dark, scanty urine, or urinary discomfort. With Da Huang, for constipation.

-Mang Xiao - Purges accumulations, eliminates Stagnation, clears Heat and reduces swelling. With Da Huang, for constipation due to Heat in the Stomach and Intestines. With Da Huang and Gan Cao, for moderate constipation due to accumulation of Excess Heat. With Da Huang, Huang Qin and Zhi Zi, for Heat in the Lungs and Stomach.

-Jing Jie - Releases the exterior and expels Wind. With Bo He, Jie Geng and Gan Cao, for acute cough due to Wind. With Lian Qiao and Bo He, for Wind-Heat common cold. With Bo He, releases the exterior to induce sweating, disperses Wind in the head and vents rashes and alleviates itching.

-Gan Cao - Moistens the Lungs, stops cough, clears Heat, relieves toxicity and harmonizes. With Jie Geng and Jing Jie, for acute cough due to Wind. With Jie Geng, for pain, swelling, and hoarseness of the throat. With Niu Bang Zi, strongly clears throat and Lungs to treat Wind-Heat attacks the Lungs or Fire toxin flaring upwards.

-Fang Feng - Releases the exterior and expels Wind. With Jing Jie, for Wind-Cold, Exterior patterns in any season, pruritic rash, initial-stage boils and to expel Wind and stop itching. With Bo He, Huang Qin, Jing Jie and Lian Qiao, for Wind-Heat. With Bo He, Lian Qiao, Huang Qin and Huang Lian, for acne due to Wind-Heat Attacking the upper body.

-Lian Qiao - Clears Heat and toxins and expels Wind-Heat. With Niu Bang Zi and Bo He, for Wei Stage Heat.

-Niu Bang Zi - Disperses Wind-Heat, benefits the throat, relieves toxins and moistens the Intestines, for Wind-Heat constipation. With Jie Geng and Bo He, for Wind-Heat sore throat. With Da Huang, for severe sore throat due to Fire toxin. With Lian Qiao, unblocks and drains Heat toxin, disperses clumps and swellings for sore, swollen throat, swellings like mumps, boils and other Heat toxin lesions and ulcerations and abscesses of the tongue and mouth. With Bo He, for sores due to Wind-Heat, dry throat, cough with yellow sputum, incomplete expression of measles or pruritic rash. With Xuan Shen and Jie Geng, for pain and swelling of the throat.

-Huang Lian - Drains Fire and relieves toxicity. With Huang Qin, drains pathogenic Heat from the Upper and Middle Jiaos for high fever, redness, swelling and pain of the head and face, dry mouth, parched throat, ulcerations of the mouth and tongue, epistaxis, rashes and irritability in warm-febrile disease. With Huang Qin and Zhi Zi, for high fever, irritability, dry mouth and throat, and dark urine due to Fire toxin in the three burners. With Huang Qin and Da Huang, for hematemesis and rectal bleeding due to Blood Heat. With Huang Qin, Da Huang and Lian Qiao, for abscesses, lesions, carbuncles, furuncles, burns, swelling and inflammation due to toxic Heat.

-Bo He - Disperses Wind-Heat and cools and clears the head and eyes, benefits the throat and vents rashes. With Jing JIe, for Wind-Heat. With Jing Jie, Niu Bang Zi and Lian Qiao, promotes the eruption of measles.

-Huang Qin - Clears Heat and drains Fire. With Huang Lian and Fang Feng, for Intestinal Wind with hemafecia. With Huang Lian and Zhi Zi, for acute febrile disease. With Zhi Zi, powerfully clears and drains lurking Heat from the Lungs with fever, fullness in the chest, cough with yellow sputum and epistaxis or hematemesis.

-Jie Geng - Spreads Lung Qi, resolves Phlegm and benefits the throat. With Niu Bang Zi, for throat inflammation and productive cough due to Wind-Heat. With Huang Qin and Gan Cao, for Hoarseness, pain and swelling of the throat due to Wind-Heat.

-Da Huang - Drains Heat, purges accumulations and relieves toxicity. With Huang Lian, for a feeling of fullness and distention due to Heat accumulation. With Huang Lian, Huang Qin, Zhi Zi and Mang Xiao, for strong pathogenic Heat in the Upper and Middle Jiaos and Upward Flaring of Heat attacking the head.

-Xuan Shen - Drains Fire and relieves toxicity. With Niu Bang Zi, Jie Geng and Bo He, for pain and swelling of the throat and purpuric rashes due to Wind-Heat. With Jie Geng and Gan Cao, for sore throat with Dryness and pain. with Niu Bang Zi and Bo He, for Initial stages of Wind-Heat where there are slight signs of toxicity.

TREATS

Laryngitis. Tonsillitis. Bad breath. Peritonsillar abscess. Epiglottitis.

* SAN WU BEI JI WAN - 三物辈急囊 - Three Substance Pill for Emergencies, Rhubarb, Ginger and Croton Formula, Pills of Three Ingredients for Sudden Syncope

ACTIONS - Harshly Purges Cold Accumulation. Alleviates pain

SYNDROMES - Sudden onset of severe Cold Accumulation due to Cold Food Stagnation in the Stomach and Intestines

CLINICAL MANIFESTATIONS - Sudden epigastric and abdominal pain and distention. The pain is so intense that it feels like an awl is piercing the abdomen. Rough, uneven breathing. Stabbing pain in the chest. Lockjaw. A cyanotic complexion. Asthma. Dyspnea. Oliguria. A pale face. No bowel movements. Rapid breathing. Constipation. Cold limbs. Possible loss of consciousness (severe cases).

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Sm. Crotonis Ba Dou is a toxic substance that should be used with extreme caution. Contraindicated for elderly or weak patients. Contraindicated during pregnancy. Contraindicated for those with acute abdominal pain due to Heat or Summerheat. Use only when absolutely necessary and in small doses.

HERBS AND ACTIONS

-Ba Dou - Warmly unblocks and vigorously purges accumulated Cold, drives out water and reduces edema.

-Gan Jiang - Warms the Middle, expels Cold, rescues Devastated Yang and expels Interior Cold.

-Da Huang - Drains Heat and purges accumulations.

TREATS

Post-operative adhesions. Intestinal obstruction. Acute cholecystitis. Sudden syncope. Ascites. Liver cancer. Recalcitrant constipation. Acute appendicitis. Food poisoning. Lockjaw. Cirrhosis of the Liver.

* XIANG SHA PING WEI SAN - 香砂平胃散 - Cyperus and Amomum Calm the Stomach Powder

ACTIONS - Strengthens the Spleen. Resolves Dampness. Promotes digestion

SYNDROMES - Food Stagnation

CLINICAL MANIFESTATIONS - Epigastric fullness, distention and pain with dislike of

pressure. Chest and diaphragm oppression. Full, painful abdomen. Belching with rotten food smell. Acid regurgitation. Detests food or. Vomits after eating. Vomiting sour, rotten food. Distention is reduced after vomiting. Unformed stools or. Knotted constipation or. Stool are hot and foul-smelling. Diarrhea. Anorexia. Foul gas.

HERBS AND ACTIONS

-Cang Zhu - Strongly dries Dampness and tonifies the Spleen. With Hou Po and Chen Pi, for epigastric fullness, fatigue and discomfort, anorexia, vomiting and/or diarrhea with a turbid, greasy tongue due to Dampness Obstructing the Middle Jiao. With Xiang Fu, for chest, epigastric and abdominal pain, distention and discomfort due to Dampness and Qi Obstruction.

-Hou Po - Promotes the movement of Qi in the Middle Jiao, resolves Stagnation, resolves Food Stagnation and promotes the movement of Qi downward. With Cang Zhu, for Dampness obstructing Spleen Yang with epigastric fullness, abdominal and epigastric distention, nausea, vomiting, anorexia, loss of taste and a thick, greasy tongue coat. With Xiang Fu and Chen Pi, for epigastric and abdominal bloating due to Dampness Obstructing the Qi. With Shan Zha, Mai Ya and Shen Qu, for Food Stagnation causing accumulation and leading to belching with a rotten odor. With Cang Zhu and Chen Pi, for Stomach Excess with epigastric fullness and distention, acid regurgitation, distasteful belching, and nausea and vomiting.

-Zhi Ke - Promotes the movement of Qi, reduces distention and pressure, resolves hardenings and removes stagnated food.

-Chen Pi - Regulates Qi, adjusts the Middle, descends Qi and relieves the diaphragm. With Sheng Jiang, for vomiting and hiccups due to Disharmony of the Stomach Qi.

-Sha Ren - Promotes the movement of Qi, aromatically transforms Dampness, strengthens the Spleen, stops vomiting, warms the Middle and stops diarrhea. With Cang Zhu, for Cold-Damp induced diarrhea and dysentery. With Chen Pi, for belching, nausea, and a stifling sensation in the epigastrium due to Disharmony of the Stomach Qi.

-Xiang Fu - Spreads and regulates Liver Qi and alleviates pain. With Cang Zhu, for indigestion, pain and distention in the flanks and abdomen, nausea, vomiting, and acid regurgitation.

-Shan Zha - Reduces and guides out Food Stagnation, transforms accumulations and stops diarrhea. With Mai Ya, Shen Qu and Zhi Ke, for abdominal distention, belching, and anorexia due to Food Stagnation with more intense symptoms such as pain. With Zhi Ke, for epigastric and abdominal distention. With Shen Qu, for general indigestion and Food Stagnation.

-Mai Ya - Reduces Food Stagnation, improves digestion, strengthens the Stomach and

facilitates the smooth flow of Liver Qi. With Chao Mai Ya, for indigestion due to Food Stagnation.

-Shen Qu - Reduces Food Stagnation, promotes digestion, moves Qi and harmonizes the Stomach. With Zhi Ke, for reduced appetite and fullness and distention of the epigastrium and abdomen due to Cold Stagnation. With Mai Ya and Shan Zha, for abdominal distention, belching, diarrhea and anorexia due to Food Stagnation and indigestion.

-Sheng Jiang - Warms the Middle, stops vomiting, normalizes the flow of Qi at the center and reduces the toxicity of other herbs. With Chen Pi, for Cold-Dampness Obstructing the Middle with nausea and hiccup.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain.

-Gan Cao - Tonifies the Spleen, augments Qi, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

TREATS

Indigestion. Nausea/Vomiting. Acid reflux. Anorexia. Diarrhea. Constipation.

* YINZHIHUANG GRANULE

Yinzhihuang granules (YZHG) is a patented Chinese medicine for the treatment of acute, chronic and severe hepatitis caused by the damp-heat toxin and can also be used for comprehensive treatment of other types of severe hepatitis, hepatitis B, liver disease, neonatal jaundice, liver injury, non-alcoholic fatty liver disease (NAFLD), alcoholic liver disease, elevated liver enzymes, viral hepatitis, drug-induced hepatitis, intrahepatic cholestasis of pregnancy, ABO maternal-fetal blood group incompatibility, and inflammation-cancer transformation of the hepar process. Yinzhihuang granules (YZHG) can clear away heat and toxic materials, promote diuresis and eliminate jaundice. The mechanism of YZHG in the treatment of hepatitis B appears to be mainly related to the cell cycle, human T-cell leukemia virus 1 infection, cellular senescence, viral carcinogenesis, and p53 signaling pathway.

Herbs - Huang Qin, Jin Yin Hua, Yin Chen, Zhizi

* ZHI SHI DAO ZHI WAN - 枳實導滯丸 - Unripe Bitter Orange Pill to Guide out Stagnation. Immature Bitter Orange Pill to Guide out Stagnation

ACTIONS - Reduces and guides out Stagnation and Accumulation. Clears Heat. Dispels Dampness

SYNDROMES - Food Stagnation in the Stomach transforming into Damp-Heat with Intestinal Obstruction. Diarrhea due to Injury by Food

CLINICAL MANIFESTATIONS - Abdominal pain (worse with pressure). Abdominal and epigastric distention. Dysentery. Scanty dark urine. Constipation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use only for Excess patterns. Contraindicated for those with dysenteric disorders without Qi Stagnation. Contraindicated for those with loose stool or diarrhea who do not have Food Stagnation. Contraindicated during pregnancy. Avoid consumption of Cold, raw foods while using this formula.

HERBS AND ACTIONS

-Zhi Shi - Breaks up stagnant Qi, reduces accumulation, descends Qi, unblocks bowels, transforms Phlegm and removes stagnant food. With Da Huang, for constipation, dysentery, distention and pain due to Food Stagnation and Blockage due to Damp-Heat.

-Da Huang - Drains Damp-Heat and purges accumulations. With Huang Lian, for fullness and distention due to Heat Accumulation.

-Shen Qu - Reduces Food Stagnation and harmonizes the Stomach. With Bai Zhu, for Food Stagnation and diarrhea due to Spleen Deficiency.

-Fu Ling - Drains Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Huang Qin - Clears Heat and dries Dampness. With Da Huang and Zhi Shi, for dysentery with tenesmus due to Food Stagnation transforming into Damp-Heat.

-Huang Lian -Clears Heat, drains Dampness and drains Stomach Fire.

-Bai Zhu - Strengthens the Spleen and resolves Dampness. With Zhi Shi, for epigastric and abdominal distention due to Spleen and Stomach Deficiency with Food Stagnation.

-Ze Xie - Clears Heat and promotes urination.

TREATS

Diarrhea due to Food injury. Acute or chronic gastroenteritis. Urinary tract infection. Acute indigestion. Acute enteritis. Asthma. Constipation. Abdominal fullness and distention. Abdominal pain. Hematemesis. Gastric ulcer. Bad breath. Epstein-Bar syndrome. Dysenteric disorders. Chronic hepatitis. Acute hepatitis. Cirrhosis of the

Liver. Trigeminal neuralgia. Acid reflux. Oliguria. Bronchitis. Nausea/Vomiting. Anorexia. Gastritis. Myalgic encephalomyelitis.

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Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_39

Bai Hu Jia Ren Shen Tang, Bai Hu Tang, Cang Er San, Gujiansan Compound, Huang Lian Tang, Huo Xiang Zheng Qi San, Sang Xing Tang, Sheng Yu Tang, Zhu Ye Shi Gao Tang

Recordings Updated in June 2025

* BAI HU JIA REN SHEN TANG - 白虎加人參湯 - White Tiger plus Ginseng Decoction. Ginseng and Gypsum Combination

ACTIONS - Clears Qi-Stage Heat. Drains Stomach Fire. Generates Fluids. Alleviates thirst. Nourishes Qi

SYNDROMES - Yang Ming Jing with Qi and Body Fluid Deficiency. Qi-Stage Heat with Qi and Body Fluid Deficiency. Injury to Qi and Fluids due to Summerheat, vomiting or purgation

CLINICAL MANIFESTATIONS - High fever. Profuse sweat. Generalized weakness. Severe chills. Aversion to Heat. Red face. Red eyes. Severe thirst. Thirst may be unquenchable. Irritability. Anxiety. Pruritis. Headache. Toothache. Gum bleeding. Epistaxis. Dry lips. Dry tongue. Dry mouth. May be sensitive to Cold in the upper back. Polyuria. Delusions. Eye congestion. Burning sensation on the skin. Itching skin. Abdominal fullness without resistance. Dry, coarse skin. Listlessness. May be heavy labored breathing. Delirious speech (serious cases). Mania (serious cases)

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - True Cold and false Heat manifesting fever with a desire for warmth, no desire to drink, agitated movements of the limbs in an otherwise subdued patient with flooding, weak pulse.

HERBS AND ACTIONS

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst, clears Excess Heat from the Lungs and clears Blazing Stomach Fire. With Zhi Mu, clears Heat from the Lungs and Stomach to alleviate irritability, moisten dryness, and

enrich Yin. With Zhi Mu, Gan Cao and Jing Mi, for Heat in the Qi or Yang Ming Stage. With Ren Shen, for excessive Heat with Qi Deficiency.

-Zhi Mu - Clears Heat from the Qi Stage, from the Lung and from the Stomach, nourishes Yin, moistens Dryness, generates fluids, clears Deficiency Fire and quenches thirst.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs. With Jing Mi, benefits the Stomach, protects fluids, and prevents the extremely Cold properties of the other herbs from injuring the Middle Jiao.

-Jing Mi - Tonifies Qi and Yang, stops restlessness, generates fluids, stops thirst and tonifies the Lungs, Spleen and Intestines.

- Ren Shen - Tonifies Qi, generates fluids and stops thirst. With Shi Gao and Zhi Mu, for Heat injuring the Qi and Yin fluids with fever, irritability, intense thirst and profuse sweating.

TREATS

Pneumonia. Cerebral bleeding. Basedow's disease. Dermatitis. Uremia. Nephritis. Cholecystitis. Nocturnal enuresis. Encephalitis B. Meningitis. Lobar pneumonia. Heat stroke. Bacterial infections. Urticaria. Epistaxis. Gastritis. Asthma. Abdominal fullness and distention. Weakness. Profuse perspiration. Toothache. AIDS/HIV/ARC. Influenza. High fever. Diabetes mellitus. Periodontitis. Common cold. Influenza. Measles. Erysipelas. Scarlet fever. Typhoid fever. Emotional disorders. Eczema. Pruritis. Gingivitis. Viral infections. Hemophthalmia. Hyperglycemia. Bronchitis. Bad breath. Upper respiratory tract infection. Peripheral neuropathy. Red eyes.

* BAI HU TANG - 白虎湯 - White Tiger Decoction. Gypsum Combination

ACTIONS - Clears Qi Stage Heat. Drains Stomach Fire. Generates Fluids. Alleviates thirst

SYNDROMES - Yang Ming Jing. Qi-level Stomach Heat. Jue Yin Heat

CLINICAL MANIFESTATIONS - High fever. Profuse sweat. Generalized weakness. Severe chills. Aversion to Heat. Red face. Red eyes. Severe thirst. Thirst may be unquenchable. Irritability. Anxiety. Pruritis. Headache. Toothache. Gum bleeding. Epistaxis. Dry lips. Dry tongue. Dry mouth. May be sensitive to Cold in the upper back. Polyuria. Delusions. Eye congestion. Burning sensation on the skin. Itching skin. Abdominal fullness without resistance. Dry, coarse skin. Listlessness. May be heavy labored breathing. Delirious speech (serious cases). Mania (serious cases)

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with fever due to Spleen and Stomach Yin Deficiency manifesting as fever, spontaneous sweat, extreme fatigue, aversion to Wind, and a Deficiency floating pulse. Contraindicated for those with True Cold and False Heat manifesting fever with a desire for warmth, no desire to drink, agitated movements of the limbs in an otherwise subdued patient and flooding, weak pulse. Contraindicated for those with Yang Ming Fu. Use caution for those with a floating, wiry and thin pulse. Use caution for those with a submerged pulse. Use caution for those with absence of thirst. Use caution for those with absence of sweating.

HERBS AND ACTIONS

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst, clears Excess Heat from the Lungs and clears Blazing Stomach Fire. With Zhi Mu, clears Heat from the Lungs and Stomach to alleviate irritability, moisten dryness, and enrich Yin. With Zhi Mu, Gan Cao and Jing Mi, for Heat in the Qi or Yang Ming Stage. With Ren Shen, for excessive Heat with Qi Deficiency.

-Zhi Mu - Clears Heat from the Qi Stage, from the Lung and from the Stomach, nourishes Yin, moistens Dryness, generates fluids, clears Deficiency Fire and quenches thirst.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs. With Jing Mi, benefits the Stomach, protects fluids, and prevents the extremely Cold properties of the other herbs from injuring the Middle Jiao.

-Jing Mi - Tonifies Qi and Yang, stops restlessness, generates fluids, stops thirst and tonifies the Lungs, Spleen and Intestines.

TREATS

Encephalitis B. Meningitis. Pneumonia. Lobar pneumonia. Heat stroke. Diabetes mellitus. Periodontitis. Common cold. Influenza. Hemorrhagic fever. Some fevers related to cancers. Acute stomatitis. Gastritis. Rheumatoid arthritis. Epistaxis. Bronchial asthma. High fever. Thrombocytopenic purpura. Weakness. Headache. Profuse perspiration. Toothache. Measles. Nasal pain. Diabetes. Erysipelas. Scarlet fever. Typhoid fever. Emotional disorders. Eczema. Pruritis. Gingivitis. Hyperthyroidism. Dermatitis. Recalcitrant allergic dermatitis. Unrelenting seepage after burns. Rheumatism. Chronic hepatitis. Viral hepatitis. Psoriasis. AIDS/HIV. Constipation. Abdominal Fullness and distention. Pyelonephritis. Sciatica. Osteoarthritis. Eclampsia. Rheumatic fever. Red eyes.

* CANG ER SAN - 蒼耳散 - Xanthium Formula

Cang Er San is used to disperse wind while opening the nasal passages helps beat allergy symptoms commonly experienced during the hot season with a Wind-Heat Attacking the Head pattern. Symptoms, copious, purulent, and even foul-smelling nasal discharge, nasal obstruction, dizziness, frontal headache. Treats rhinorrhea, acute and chronic rhinitis, acute and chronic sinusitis, allergic rhinitis.

Herbs - Bai Zhi, Cang Er Zi, Cong Bai, Bo He, Xin Yi, Cha Ye

* GUJIANSAN COMPOUND

Gujiansan Compound was developed by the Ruikang Hospital Affiliated with Guangxi University of Chinese Medicine, contains the compound medicines below and has been clinically used to treat patients with avascular necrosis of the femoral head (ANFH).

Herbs - Xi Yang Shen, Tai Zi Shen, Huang Qi, Lu Jiao, San Qi, Gu Sui Bu, Ling Zhi, Dan Shen, Qian Jin Ba, Jin Yin Hua, Xi Xin Hong Hua, Shi Chang Pu.

* HUANG LIAN TANG - 黃蓮湯 - Coptis Decoction. Coptis Combination

ACTIONS - Regulates Cold and Heat. Harmonizes the Stomach. Descends Rebellious Qi

SYNDROMES - Heat above and Cold below caused by Transmission of External Cold to the Middle Jiao. Heat in the chest and Cold in the Stomach

CLINICAL MANIFESTATIONS - Stifling sensation and irritability in the chest. Nausea with an urge to vomit. Abdominal pain. Fever with slight chills. Diarrhea. Vexation. Borborygmus. Thirst.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - This formula is not effective for nausea, vomiting and abdominal pain due to Qi or Food Stagnation. Contraindicated for those with nausea, vomiting and abdominal pain due to Yin Deficiency.

HERBS AND ACTIONS

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity.

-Gan Cao - Tonifies the Spleen, augments Qi and moderates and harmonizes the harsh properties of other herbs.

-Gan Jiang - Warms the Middle, expels Cold and dispels Wind-Dampness seeping into the Lower Jiao. With Ban Xia, for vomiting of saliva or dry heaves due to Cold-induced congested fluids. With Gan Cao, for epigastric pain and vomiting due to Spleen and

Stomach Deficiency Cold. With Ban Xia and Ren Shen, for vomiting due toe Deficiency Cold.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, unblocks Yang, transforms Qi and thin mucus, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels, warms the Middle and directs Turbid Yin downward.

-Ren Shen - Tonifies Spleen and Stomach Qi and tonifies Qi in Deficiency patients with Exterior conditions.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi and stops vomiting. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi and moderates and harmonizes the harsh properties of other herbs.

TREATS

Acute gastritis. Hyperacidity of the Stomach. Gastric and duodenal ulcers. Gastroenteritis. Epigastric pain. Hangover. Hiccup. Cholera. Abdominal pain. Indigestion. Atrophic gastritis. Allergic colitis. Cholecystitis. Acid reflux. Stomatitis. Dysentery. Acute enteritis. Nausea/Vomiting. Diarrhea.

* HUO XIANG ZHENG QI TANG - 藿香正氣汤 - Agastache Powder to Rectify the Qi. Agastache Formula. Powder for Dispelling Turbidity with Agastache

ACTIONS - Releases the Exterior. Transforms Dampness. Regulates Qi. Harmonizes the Middle Jiao

SYNDROMES - Exogenous Wind Cold with Spleen and Stomach Deficiency (External/Internal Damp). Summer Heat with Cold complications. San Jiao - Cold-Damp in the Upper Jiao

CLINICAL MANIFESTATIONS - Fever and chills. Headache. Chest and gastric fullness and oppression. Pain in the epigastrium and abdomen. Nausea and vomiting. Borborygmus. Diarrhea. Loss of taste. Aversion to Cold. Cough. Indigestion. No perspiration. Chest discomfort. Sore throat. Disorientation. Madness. General lassitude. Anorexia. Delirious speech. Maybe loss of voice. Intermittent chills and fever. Afternoon fever and tight. Sudden turmoil disorder. Malarial disorders. Loose stools.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Damp-Heat with thirst, dry throat, greasy yellow tongue coat. Modify for Wind-Heat or Fire due to Deficiency. Contraindicated for those with Yin or Blood Deficiencies.

HERBS AND ACTIONS

-Huo Xiang - Aromatically transforms Dampness, harmonizes the Middle Jiao, stops vomiting and releases the exterior. With Zi Su Ye and Hou Po, for fever and chills, a stifling sensation in the chest and epigastrium, cough and nausea due to Wind-Cold with Dampness Obstructing the Middle Jiao. With Ban Xia, Fu Ling and Hou Po, for early stages of Damp-Warmth when Dampness predominates with fever, a stifling sensation in the chest, nausea, a sense of being encumbered a sticky sensation in the mouth and a lack of thirst. With Zi Su Ye, transforms Dampness, regulates Qi, harmonizes the Stomach, stops nausea and vomiting and treats turbid Dampness Obstructing the Spleen with lethargy, a stifling sensation in the chest, nausea , loss of appetite, diarrhea or loose stools and a thick tongue coat and releases the Exterior to treat Externally contracted pathogens such as Externally- contracted Cold during Hot, Damp summer weather, with fever, lethargy, a stifling sensation in the chest and nausea. With Zi Su Ye and Bai Zhi, for Summer-Dampness with Wind-Cold. With Ban Xia, for nausea and vomiting.

-Hou Po - Transforms Dampness, promotes the movement of Qi, warms and invigorates the Spleen, and descends Rebellious Qi. With Ban Xia and Fu Ling, for Phlegm Obstructing the Qi, leading to coughing, vomiting or a sense of something stuck in the throat.

-Chen Pi - Regulates Qi, tonifies Spleen, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and descends Qi. With Sheng Jiang, for vomiting and hiccups due to Disharmony of the Stomach Qi and Cold-Dampness Obstructing the Middle with nausea and hiccup. With Ban Xia, for a stifling sensation in the chest and cough with excessive white, viscous sputum due to Phlegm-Damp Obstruction.

-Zi Su Ye - Releases the exterior, disperses Cold and moves Spleen and Stomach Qi. With Huo Xiang, releases the exterior, regulates Qi, warms the Middle, and transforms turbidity. With Jie Geng, for Common colds with nasal congestion and productive cough. with Huo Xiang, releases the exterior, regulates Qi, warms the Middle, and transforms turbidity for influenza and common cold due to Wind-Cold-Dampness and is especially effective for abdominal pain, vomiting, and diarrhea and for externally-contracted Cold during Hot, Damp summer weather, with fever, lethargy, a stifling sensation in the chest and nausea. with Ban Xia and Hou Po, for Spleen and Stomach Qi Stagnation with accumulation of Phlegm. With Chen Pi, Ban Xia and Huo Xiang, for Stomach flu or acute enteritis due to Spleen and Stomach Qi Stagnation.

-Bai Zhi - Expels Wind and disperses Cold. With Gan Cao, for stomachache and ulcer pain. With Jie Geng, for ulcerated boils when pus has not been discharged.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, harmonizes the Stomach and stops vomiting. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi. With Fu Ling, treats Phlegm, thin mucus

and turbid Dampness. With Sheng Jiang, for vomiting due to Cold, Thin Mucus. With Huo Xiang, for nausea with lethargy, anorexia, poor concentration and a swollen, pale tongue with a greasy, white coat due to turbid Dampness in the Spleen and Stomach, vomiting during the summer and fever, vomiting, lethargy and diarrhea associated with Summerheat. With Hou Po, for Phlegm-induced cough, vomiting, and epigastric and abdominal distention, Phlegm-Dampness with Qi Stagnation, Phlegm and Qi Obstruction with a sensation of fullness in the chest with coughing and wheezing, nausea, vomiting and a sensation of distention in the hypochondrium and Plum-pit Qi Stagnation. with Hou Po, Zi Su Ye and Fu Ling, for Plum-pit Qi Stagnation.

-Da Fu Pi - Promotes movement of Qi, descends Qi, expels Dampness, promotes urination and reduces edema. With Hou Po and Chen Pi, for epigastric and abdominal distention and discomfort with difficult bowel movements associated with stagnant Qi and Dampness.

-Bai Zhu - Tonifies the Spleen, tonifies Qi, dries Dampness and stabilizes the exterior. With Da Fu Pi, strengthens the Spleen, assists transportation, dredges clogged Stagnation, facilitates the removal of pathogenic water and Dampness, and reduces edema for treatment of Spleen Qi Deficiency with Dampness Obstruction (loss of appetite, epigastric and abdominal fullness and distention, and edema) and Spleen Qi Deficiency with Dampness accumulating in the skin with floating edema. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency. With Fu Ling and Sheng Jiang, for edema with Kidney Yang Deficiency.

-Fu Ling - Promotes urination, resolves Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Ban Xia, expels Phlegm and stops nausea and vomiting. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention, and anorexia due to congested fluids. With Ban Xia, Chen Pi and Sheng Jiang, for congested fluids in the Stomach causing nausea and vomiting. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Jie Geng - Opens Lungs, spreads Lung Qi and expels Phlegm. With Gan Cao, for hoarseness, pain and swelling of the throat due to Wind-Heat, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat, Lung abscess with expectoration of pus and pain in the chest and flanks and Excess disorders in the Upper Jiao with no disorder in the Lower Jiao. With Ban Xia, for cough due to Wind-Cold Invasion or long-standing Phlegm-Dampness.

-Sheng Jiang - Releases the exterior, warms the Middle and adjusts the Ying and Wei. With Da Zao, adjusts the Ying and Wei for treatment of Tai Yang Zhong Feng, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen, protects Stomach Qi and reduces irritation of the gastrointestinal tract by other herbs. With Ban Xia, for productive cough due to Phlegm-Dampness. With Zi Su Ye, for vomiting and diarrhea from seafood poisoning.

-Da Zao - Strengthens the Spleen, tonifies Qi and moderates and harmonizes the harsh properties of other herbs.

-Gan Cao - Tonifies the Spleen, tonifies Qi and moderates and harmonizes the properties of other herbs.

TREATS

Influenza (Stomach flu). Intestinal flu. Nonspecific acute colitis. Acute gastroenteritis. Common cold. Heat stroke. Infantile cough. Infantile eye ailments. Acute colitis. Diaper rash. Coronary artery disease. Headache. Irritable bowel syndrome. Abdominal pain. Nausea/Vomiting. Abdominal fullness and distention. Anorexia. Hot skin with perspiration. Tumors of the ears. Nasal pain. Vomiting associated with AIDS/HIV/ARC. Infantile toothache due to stagnant food. Infantile sore throat. Viral enteritis. Acute gastritis. Acute enteritis. Mild miasmic malaria. Dyspepsia. Sunstroke. Food poisoning. Fungal infection. Toxicity secondary to chemotherapy. Gastralgia. Dysentery. Fever. Abdominal Cold. Diarrhea. Psychosis. Indigestion. Chemotherapy for breast cancer. Diarrhea associated with AIDS/HIV

* SANG XING TANG - 桑杏湯 - Mulberry Leaf and Apricot Kernel Decoction. Morus and Armeniaca Decoction.
Morus and Apricot Kernel Combination. Decoction of Morus Leaf and Apricot Kernel. Decoction of Morus and Apricot Seed

ACTIONS - Clears and Disperses Wind-Heat and Dryness. Moistens the Lungs

SYNDROMES - External Wind, Heat and Dryness

CLINICAL MANIFESTATIONS - Dry hacking cough. Chest pain during severe coughing fits. Headache (lighter and more on the surface). Moderate fever. Dry throat. Dry skin. Dry nose. Aversion to Cold. Headache. Thirst. Maybe hemoptysis. Little sticky or no Phlegm.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency.

HERBS AND ACTIONS

-Sang Ye - Relieves Wind-Heat, clears Lung Heat, moistens Dryness and stops cough. With Xing Ren, for headache, fever, and dry non-productive cough from External Warm-Dryness disorders.

-Xing Ren - Regulates Lung Qi, stops cough and wheezing, moistens the Intestines and unblocks bowels. With Sang Ye, for non-productive dry cough due to Wind-Heat.

-Zhi Zi - Clears Heat, reduces Fire, eliminates irritability, drains Damp-Heat, cools the Blood and relieves toxicity.
With Dan Dou Chi, for insomnia and irritability from Deficiency due to Heat lingering in the chest.

-Dan Dou Chi - Expels Wind-Cold or Wind-Heat, eliminates irritability and relieves stuffy sensations in the chest.

-Zhe Bei Mu - Clears Heat, transforms Phlegm and stops cough.

-Bei Sha Shen - Moistens the Lungs, stops cough, nourishes Stomach Yin, generates fluids, clears Heat and moistens the Exterior.

TREATS

Flu with dry cough. Upper respiratory tract infection. Measles during the disappearance of the rash. Pharyngitis. Pertussis. Hemoptysis. Acute laryngitis. Bronchial asthma. Fever. Loss of voice. Sjogren's Syndrome. Tongue pain. Common cold. Acute and chronic bronchitis. Bronchiectasis. Pulmonary tuberculosis. Pleurisy. Nasal Dryness. Cough. Acute tonsillitis. COPD. Hoarseness. Headache. Dry skin. Sore throat.

* SHENG YU TANG - 聖愈湯 - Sage-Like Healing Decoction. Dang Gui Four Plus Combination

ACTIONS - Augments Qi. Tonifies the Blood. Preserves the Blood. Tonifies Yin

SYNDROMES - Qi and Blood Deficiency with lower abdominal aching. Atrophy disorder (Wei Syndrome) due to Blood Deficiency

CLINICAL MANIFESTATIONS - A constant ache in the lower abdomen that occurs during or just after menstruation. The pain responds favorably to pressure. Scanty and pale menstrual flow. Pale complexion. Palpitations. Thirst. Listlessness. Menstrual bleeding that is light in color. Lethargy. Weak limbs. Withdrawn behavior. Restlessness. Insomnia. Sensation of Heat. Maybe irritability.

NOTES - There are several formulas with this name.

HERBS AND ACTIONS

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin, generates fluids and cools Heart Fire. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Shu Di Huang - Nourishes the Blood, nourishes Liver and Kidney Yin, nourishes Jing and Blood and fills the Marrow. With Dang Gui, for Blood Deficiency marked by

dizziness, palpitations, insomnia and menstrual dysfunction. With Ren Shen, for Qi and Blood Deficiency.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and alleviates pain. With Dang Gui, for Blood Deficiency causing menstrual problems including dysmenorrhea, scanty menses, and amenorrhea.

-Ren Shen - Tonifies Qi. With Shu Di Huang, for severe Qi and Blood Deficiency due to loss of Blood. With Huang Qi, for Qi Deficiency with general debility, anorexia, and spontaneous sweat.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood, regulates the menses, disperses Cold and stops pain due to Blood Stasis. With Huang Qi, for Qi and Blood Deficiency. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Huang Qi - Tonifies Qi and Blood and relieves numbness and pain. With Dang Gui, for Qi and Blood Deficiency with chronic non-healing sores, numbness, painful obstruction and paresthesia.

TREATS

Sores and abscesses that bleed profusely and cause insomnia and irritability. Early menstruation. Amenorrhea. Atrophy (Wei) Syndrome. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Congestive Heart failure. Polymyositis/Dermatomyositis. Diabetes. Anemia. Blood Loss. Dysmenorrhea. Threatened miscarriage. The sequelae of poliomyelitis. Acute infectious multiple neuritis. Progressive muscular dystrophy. Hysterical paralysis. Periodic paralysis. Facial paralysis. A constant premenstrual ache. Palpitations. Lochioschesis.

* ZHU YE SHI GAO TANG - 竹葉石膏湯 - Lophatheri and Gypsum Decoction. Bamboo Leaves and Gypsum Combination. Decoction of Bamboo Leaf and Gypsum

ACTIONS - Clears Heat. Generates fluids. Tonifies Qi. Harmonizes the Stomach

SYNDROMES - Qi Stage Lung and Stomach Heat Injuring the Qi and Fluids. Stomach Fluid Deficiency. Summerheat Stroke

CLINICAL MANIFESTATIONS - Lingering fever from a febrile disease. Vomiting. Irritability. Thirst with a desire to drink. Parched mouth, lips and throat. Choking cough. Restlessness. Insomnia. Nausea. Anorexia. Profuse perspiration. A dry mouth. Indigestion. Toothache. Listlessness. Chest oppression. Ulcerations of the mouth. Coarse skin. Cough. Night sweats. Stifling sensation in the chest or epigastrium.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with febrile disease where both normal and pathogenic Qi are abundant. Contraindicated for those with febrile disease where the fever remains high. Contraindicated for those with febrile disease where the Qi and Yin have not been injured. Contraindicated for those with febrile disease, a stifling sensation in the chest, dry heaves, and a yellow greasy tongue coat due to Damp-Heat.

HERBS AND ACTIONS

-Dan Zhu Ye - Clears Heat, eliminates irritability, promotes urination and clears Damp-Heat. With Shi Gao, clears Yang Ming Heat and relieves irritability and lingering fever from febrile disease with insomnia, irritability and a scanty dry tongue coat.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst, clears lung Heat and Blazing Stomach Fire. With Dan Zhu Ye and Mai Men Dong, for lingering fever from late stage febrile disease with dysphoria, thirst and a red tongue with no coat. With Ren Shen, for excessive Heat with Qi Deficiency. With Ren Shen, and Mai Men Dong for excessive Heat with Qi and Yin Deficiency.

-Ren Shen - Tonifies Qi. With Mai Men Dong, tonifies Qi and generates fluids.

-Mai Men Dong - Moistens the Lungs and Stomach, nourishes Yin, generates fluids, clears the Heart and eliminates irritability. With Ban Xia, Gan Cao and Jing Mi, for Stomach Yin Deficiency with hiccups and vomiting.

-Ban Xia - Descends Qi and stops vomiting. With Ren Shen, for vomiting due to Stomach Deficiency.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs. With Jing Mi, assists Ren Shen in tonifying Qi, Nourishes the Stomach and harmonizes the Middle Jiao. With Ren Shen, relieves palpitations and anxiety.

-Jing Mi - Tonifies the Qi of the Lungs, Spleen and Intestines, stops restlessness, stops thirst and generates fluids.

TREATS

Pneumonia (recovery stage). Encephalitis B (recovery stage). Measles (recovery stage). Meningitis (recovery stage). Hemorrhagic fever (recovery stage). Influenza (recovery stage). Ephidrosis. Common cold. Bronchitis. Bronchial asthma. Pertussis. Systemic lupus erythematosis. Fever. Gingivitis. Glossitis. Summerheat stroke. Septicemia. Hyperglycemia. Nausea/Vomiting. Depression. Schizophrenia. Anorexia. Hematemesis. Herpes simplex. Menopause syndrome. Profuse perspiration. Indigestion. Constipation. Rheumatic fever. Pulmonary emphysema. Pulmonary

gangrene. Tuberculosis. Scarlet fever (recovery stage). Diabetes mellitus. Polyphagia. Pharyngitis. Nephritis. Fevers from post-surgical infections. Fevers in response to chemotherapy or radiation therapy. Stomatitis. Nervous exhaustion. Toothache. Insomnia. Hiccup. COPD. Anxiety neurosis. Panic attacks. Bipolar disorder. Neurasthenia. Allergic purpura. Herpes zoster. Hot flashes. Bad breath. Night sweats. Thrush. Puerperal fever.

1.3.3.40 RT-TCM-40

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_40

Bi Shu Ling, Ding Zhi Wan, Hu Qian Wan, Moisten Skin-TCM, Post-Stroke Rehabilitation-TCM, Post-Stroke Spasticity-TCM, Qi Yin San Liang San, Shi Bi Man, Zuo Jin Wan

Recordings Updated in June 2025

* BI SHU LING - 鼻舒靈 - Nose Soothing Elixir

ACTIONS - Clears Heat. Tonifies Qi. Eliminates Dampness. Activates the Blood. Calms the Liver. Opens the nasal passages

SYNDROMES - Lung Qi Deficiency with Liver Qi Stagnation Invading the Spleen, Blood Stagnation and Deficiency Heat

CLINICAL MANIFESTATIONS - Chronic variable and intermittent nasal and sinus congestion or. Continuous or sustained nasal congestion. Chronic discharge of copious thin white or sticky mucus which does not smell (even though the patient may perceive it to). The discharge is aggravated to exposure to Wind and Cold. It may be worse when lying down or at night and better during the day. Pale, swollen mucous membranes. Variable and transient sense of smell or. Transient, declining sense of smell or loss of sense of smell or. Permanent loss of sense of smell. Dull or thick headache with dizziness. Easily catches cold. Heavy-headedness. Dizziness. Shortness of breath. Weak voice or. Reluctance to speak. Fatigue. Spontaneous sweating. Weak cough with thin white or watery sputum. Waxy, pale complexion. Sinus pain. Generally severe frontal, maxillary or temporal headache. Chronic sinus inflammation and congestion which is worse with stress or emotional upset. May have occasional postnasal discharge. Frontal or temporal headaches. Neck and shoulder tension. Red eyes. Facial flushing. Irritability. Easily angered. Hypochondriac tension or discomfort. Bitter taste in the mouth. Chronic, continuous nasal congestion or. Post nasal drip with sticky yellow or

white. Nasal mucous membranes appear swollen, hard and or dark purple. Reduction or loss of sense of smell.

HERBS AND ACTIONS

-Yu Xing Cao - Clears Heat, relieves toxicity, reduces swellings and abscesses and expels pus, especially in the Lungs.

-Pu Gong Ying - Clears the Liver, clears Heat and resolves Dampness.

-Chai Hu - Spreads Liver Qi, relieves Stagnation, disperses Wind-Heat and resolves Phlegm and congestion. With Huang Qin, restores the normal functioning of the Liver and Gallbladder.

-Cang Er Zi - Disperses Wind and Dampness and opens the nasal passages.

-Huo Xiang - Aromatically transforms Dampness and releases the Exterior.

-Yi Yi Ren - Strengthens the Spleen, resolves Dampness, expels Wind-Dampness and relieves pain.

-Dan Shen - Activates the Blood, dispels Blood Stasis, clears Heat and soothes irritability.

-Huang Qin - Clears Heat, dries Dampness and calms ascending Liver Yang.

-Bai Zhu - Tonifies the Spleen, augments Qi and dries Dampness.

-Chuan Xiong - Activates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm, removes filth, calms the Spirit, disperses Wind, transforms turbid Dampness, harmonizes the Middle Jiao, awakens the Spleen, promotes the movement of Qi, promotes Blood flow, reduces swelling and alleviates Wind-Damp.

TREATS

Chronic sinusitis. Red eyes.

* DING ZHI WAN - 定志丸 - Settle the Emotions Pill

ACTIONS - Calms the Shen. Tonifies the Heart Qi. Pacifies timidity

SYNDROMES - Heart and Gallbladder Qi Deficiency. Heart Qi Deficiency and

Stagnation due to Phlegm Turbidity

CLINICAL MANIFESTATIONS - Insomnia or frequent waking, often early in the morning. Unable to fall back to sleep. Nightmares. Waking terrified. Easily frightened or startled. Easily unsettled by seeming trivial events. Apprehension. Restlessness. Fearfulness. Inappropriate worry. Timidity. Phobias. Anxiety (frequent and severe). Feeling disheartened. Forgetfulness. Frequent panic attacks. Palpitations. Shortness of breath. Incessant laughter and glee. Lethargy. Fatigue. Depression. Postnatal depression. Spontaneous sweating. Worry. Dizziness.

HERBS AND ACTIONS

-Ren Shen - Tonifies Heart Qi and calms the Spirit. With Fu Ling, Shi Chang Pu and Yuan Zhi, for confusion and forgetfulness.

-Fu Ling - Quiets the Heart, calms the Spirit and soothes the nerves. With Shi Chang Pu and Yuan Zhi, for insomnia and palpitations due to Spleen and Heart Insufficiency or Phlegm Obstructing the Heart.

-Shi Chang Pu - Opens the Orifices, vaporizes Phlegm, removes filth, calms the Spirit and disperses Wind.
With Yuan Zhi and Fu Ling, for forgetfulness, tinnitus, and impaired hearing. With Ren Shen, Fu Ling and Yuan Zhi, for forgetfulness and dulled senses.

-Yuan Zhi - Calms the Spirit and sedates the Heart and clears the channel joining the Heart and Kidney.
With Ren Shen, Fu Ling and Shi Chang Pu, calms the spirit.

TREATS

Anxiety neurosis. Mental disorders. Obsessive-compulsive disorder. Seizures. Palpitations. Bi-polar disorder. Anxiety. Sinus tachycardia. Premenstrual syndrome. Spontaneous perspiration. Dyspnea. Postnatal depression. Depression. Myopia. Cardiac arrhythmia. Insomnia. Neurosis. Panic attacks. Neurasthenia. Fatigue. Spermatorrhea.

* HU QIAN WAN - 虎潛丸 - Hidden Tiger Pill

ACTIONS - Enriches Yin. Descends Fire. Strengthens the sinews and bones

SYNDROMES - Atrophy disorder (Wei Syndrome) due to Liver and Kidney Deficiency

CLINICAL MANIFESTATIONS - Weakness and soreness of the lower back and knees. Deterioration of the sinews and bones with a general reduction in function. Wasting of the muscles of the legs and feet. Difficulty walking. Dizziness. Tinnitus. Spontaneous

emissions. Urinary incontinence.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Wei Syndrome due to Spleen and Stomach Deficiency or Damp-Heat.

HERBS AND ACTIONS

-Huang Bai - Drains Damp-Heat especially from the Lower Jiao, drains Kidney Fire, drains Fire and relieves Fire toxicity.

-Zhi Mu - Clears Heat, drains Fire, nourishes Yin, clears Deficiency Fire, moistens Dryness, generates Fluids and quenches thirst. With Huang Bai, clears Heat and Drains Fire for Yin Deficiency Fire and steaming Bone disorder from Yin Deficiency with night sweats, dizziness, and vertigo.

-Shu Di Huang - Nourishes Jing and Blood, strongly enriches Yin and fills the Marrow. With Gui Ban, for dizziness, insomnia, tinnitus, forgetfulness, afternoon fevers, and night sweats due Yin Deficiency with Yang Rising. With Huang Bai and Zhi Mu, for Lower Jiao Wasting and Thirsting with Yin Deficiency Heat. With Gui Ban, Suo yang and Zhi Mu, for weakness and soreness of the knees due to Kidney Yin Deficiency Fire.

-Gui Ban - Nourishes Yin, anchors Yang,benefits the Kidneys, strengthens the bones, nourishes the Blood, enriches Yin and stabilizes the Chong and Ren channels.

-Bai Shao - Nourishes the Blood, astringes Yin, calms Liver Yang and Liver Wind and alleviates pain.

-Hu Gu - Dispels Wind-Dampness, controls pain and strengthens the sinews and bones.

-Suo Yang - Tonifies the Kidneys, benefits Jing and marrow, strengthens Yang, nourishes Liver Yin and Blood and strengthens sinews and bones. With Shu Di Huang and Gui Ban, for soreness and weakness of the back and knees.

-Gan Jiang - Warms the Middle, expels Cold and dispels Wind-Dampness seeping into the Lower Jiao.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm.

TREATS

Atrophy (Wei) Syndrome. Amyotrophic lateral sclerosis (ALS). Tinnitus. Spermatorrhea. Urinary incontinence. Dizziness. Lumbago. Muscular atrophy. Flaccidity of the muscles and bones. Chronic arthritis. Hypocalcemia. Physical retardation in infants. Lateral spinal sclerosis. Consumptive fever. Rheumatoid arthritis. Tuberculosis of the knee. Stroke with numbness and weakness. Post-stroke sequelae. Cervical spondylosis.

Sciatica. Peripheral neuropathy. Knee pain. Atrophy and degeneration of the nervous system. Atrophy and degeneration of the reproductive system. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. Weakness. Stroke. Polymyositis/Dermatomyositis.

* MOISTEN SKIN-TCM

Moisten Skin TCM with He Shou Wu nourishes the skin and nails, prevents graying of hair, Gou Qi Zi and Di Huang, will moisten the skin from the inside.

* POST-STROKE REHABILITATION-TCM

Post-Stroke Rehabilitation TCM, is a health facility designed formula composed of Huang qi, Danshen, Shao yao, Jue Ming Zi, Chuan Xiong, Dang Gui, and Gan Cao. This formula demonstrated neuroprotective effects by protecting cultured neurons against N-methyl-D-aspartate excitotoxicity and reducing ischemic injury. It may be useful on long-term effects after snakebite envenomation along Er Xian (RT-TCM 08) and Tiannianyin (RT-TCM 34).

* POST-STROKE SPASTICITY-TCM

Post-Stroke Spasticity TCM is Baishao Luoshi decoction (白芍络石方) an excellent representative of TCM which can prevent and treat post stroke spasticity. Baishao Luoshi decoction can ameliorate spasticity and enhance the motor function of hemiplegic upper limb, improve the daily living ability in PSS patients, and with a reliable security. Baishao Luoshi decoction can rescue the synaptic structure injured by ischemia, promote nerve growth and improve synaptic plasticity. .

Herbs - Baishao, Luo Shi Teng

* QI YIN SAN LIANG SAN

Qi Yin San Liang San treats adverse skin reactions, the most common side effect of epidermal growth factor receptor inhibitors (EGFRIs) in the treatment of cancer, significantly affecting the survival rate and quality of life of patients. Qi Yin San Liang San Decoction (QYSLS) comes from folk prescription and is currently used in the clinical treatment of adverse skin reactions caused by EGFRIs. Among cancer-targeted therapy, epidermal growth factor receptor inhibitors (EGFRIs) are widely used in clinical practice to treat cancer patients harboring activating mutations in EGFR, especially for

non-small cell lung cancer, breast cancer, colorectal carcinoma. With the applications of EGFRIs, multiple adverse reactions are present in several patients, in which cutaneous adverse reaction (including rashes, xerosis, pruritus, paronychia, et al.) and diarrhea are the most common adverse effects. QYSLS is widely used in clinical practice, including skin and gastrointestinal diseases.

Herbs - Huang Qi, Jin Yin Hua, Dang Gui, Gan Cao, Quan Xie.

* SHI BI MAN (UPDATE -Revised in 2025/08/13)

Shi Bi Man is a mixture of a variety of Chinese herbs, including ginseng radix, tea polyphenols, polygonum multiflorum, radix angelicae sinensis, aloe, linseed and green tea extract. Shi Bi Man promotes hair regeneration by activating the FGF pathway in dermal papilla cells. Shi Bi Man also ameliorates psoriasis via inhibiting IL-23/Th17 axis and CXCL16-mediated endothelial activation. Shi Bi Man regulates lactic acid metabolism and drives hair follicle stem cell activation to promote hair regeneration.

+ Nutritional Flavonoids component details at RT-TCM 48

+ Hair Regrowth Related Genes, CTNNB1, LEF1, WNT10B, WNT7B, BMP2, BMP4, BMPR1A, NOG, SHH, PTCH1, SMO, GLI1/2, FGF5, FGFR2, KROX20, NOTCH1, JAG1, DLL1, HES1, TGFB1/2, SMAD2/3, SMAD7, JAK1/2/3, STAT3/5, AR, SRD5A2, IGF1, IGF1R, EGFR, ERBB2, PPARG, FABP4, SCUBE3, MSRA, MSRB, CAT, L-methionine

+ Hair Regrowth Complex is, Zinc Picolinate, L-Ascorbic Acid, Ferrous Bisglycinate, Hyaluronate Decasaccharide, MSM, Glycyrrhizinate dipotassium, Panthenol, Niacinamide, Copper peptides GHK-C, Propanediol, Acetyl Glutamine, Dimethyl Isosorbide, Palmitoyl Tripeptide-8, Soya lecithins, Trehalose, Glycerin, Stearic acid, Aquoeus Core at Ph 5.5 (citric acid + water)

Herbs - Ren Shen, Cha Ye, He Shou Wu, Dang Gui, Lu Hui, Ya Ma Zi, Lv Cha, Nutritional Flavonoids (404.7 Hz), Hair Regrowth Related Genes (531.7), Hair Regrowth Complex (605.6 Hz)

* ZUO JIN WAN - 左金丸 - Left Metal Pill. Left Gold Pill. Coptis and Evodia Pills

ACTIONS - Clears Liver Heat (Fire). Descends Rebellious Qi. Stops vomiting

SYNDROMES - Liver Qi Stagnation. Liver Qi Invades the Stomach (with Heat). Heat in the Liver Channel with Stomach Disharmony. Excess Fire in the Liver Channel with Heat in Stomach

CLINICAL MANIFESTATIONS - Hypochondriac pain and distention. Indeterminate gnawing hunger. Epigastric distention and pain. Vomiting. Acid regurgitation. Belching. Bitter taste. Dry mouth. Nausea. Dry lips. Hiccups.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Acid regurgitation due to Stomach Deficiency Cold. Do not use to treat hypochondriac pain due to Liver, Gallbladder or Blood Deficiencies. Contraindicated during pregnancy. This formula may have a protective effect against aspirin-induced damage to Stomach mucosa.

HERBS AND ACTIONS

-Huang Lian - Drains Liver Fire, clears Stomach Heat, and descends rebellious Qi. With Wu Zhu Yu, for Liver or Stomach Fire with epigastric and abdominal upset and pain and acid regurgitation.

-Wu Zhu Yu - Circulates Qi, relieves Stagnation, warms the Middle Jiao, disperses Cold and descends rebellious Stomach Qi. With Huang Lian, for Heat induced disharmony between Liver and Stomach.

TREATS

Acute gastritis. Peptic ulcer. Esophageal reflux. Hiatus hernia. Acid regurgitation. Cholecystitis. Pernicious vomiting. Gastralgia. Uterine fibroids. Fever. Hypertension. Cirrhosis of the Liver. Nausea/Vomiting. Chronic gastritis. Bacillary dysentery. Allergic colitis. Esophagitis. H. pylori infection. Hepatitis. Morning sickness. Hiccups. Stress. Indigestion. Hangover.

1.3.3.41 RT-TCM-41

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_41

Bushen Huoxue Tongluo, Erlong Zuoci Formula, Gushen Shuer Pian, Internet Addiction-TCM, Internet Gaming Disorder-TCM, Jian Er Preparation, Soft Tissue Injuries-TCM, Xingshuian Prescription, Zuo Gu Shen Jing Tong

Recordings Updated in June 2025

* BUSHEN HUOXUE TONGLUO

Bushen Huoxue Tongluo Granules (BHT). BHT is developed for those with the most common TCM syndrome, kidney essence deficiency, and stagnation of Qi and blood

flowing in the meridian around the ears, in patients with chronic tinnitus. Tinnitus is the perception of sound in the absence of external auditory stimulation. From the view of TCM, BHT is of generally neutral nature (not hot or cold), which enlarges the scope of its clinical application. BHT is Er Long Zuo Ci Pill with several other herbs with an effect of activating blood circulation, dredging the meridians, and tranquilizing the mind. Herbs,

-Dihuang, Shanzhuyu, Xuduan have the effect of tonifying kidney essence. Mudanpi, Danshen, Chuanxiong, and Taoren have the effect of activating blood circulation.

-Fuling, Chaihu, Fabanxia, Gegen, and Shichangpu have the effect of dredging the meridians.

-Suanzaoren, Cishi, and Zhenzhu have the effect of suppressing hyperactive liver yang and tranquilizing the mind.

* ERLONG ZUOCI FORMULA - 耳聾左慈丸

Erlong Zuoci decoction (ELZCD), a typical traditional Chinese medicine (TCM) prescription, has long been clinically used in treatment of deafness and tinnitus with the syndrome of "kidney yin deficiency".

Er Long Zuo Ci Pill is modified from a classic TCM formula. The formula is designed following the core treatment strategy suitable for those patients with syndrome of kidney essence deficiency and Qi and blood stagnation, who generally have symptoms of low back pain, general fatigue, or dark or pale tongue from a Chinese medicine perspective.

Er Long Zuo Ci Pill is composed of eight herbs, namely,

- Rehmannia glutinosa (Gaertn.) DC (Orobanchaceae) (Dihuang),
- Cornus officinalis Siebold & Zucc (Cornaceae) (Shanzhuyu),
- Paeonia × suffruticosa Andrews (Paeoniaceae) (Mudanpi),
- Bupleurum falcatum L (Apiaceae) (Chaihu),
- Poria cocos (Schw.) Wolf (Fuling),
- Magnetitum (Cishi),
- Dioscorea oppositifolia L (Dioscoreaceae) (Shanyao), and
- Alisma plantago-aquatica subsp. orientale (Sam.) Sam (Alismataceae) (Zexie), which has the main effect of tonifying kidney essence.

* GUSHEN SHUER PIAN

Gushen Shuer Pian replenishes essence and marrow, strengthens waist and kidneys, strengthens muscles and bones, relaxes muscles and activates collaterals, nourishes blood and relieves pain. Used for diseases caused by bone hyperplasia. The medication

could effectively alleviate aural fullness, dizziness, lassitude of loins and knees, dysphoria with feverish sensation in chest, insomnia, and fatigue, etc. No adverse effect was reported during treatment; no abnormal results were reported in blood, urine, faces, heart function, liver function and kidney function examination. Gushen Pian had beneficial effect on deafness and tinnitus and could effectively alleviate aural fullness, insomnia, etc., without any adverse effects.

Herbs - Gu Sui Bu, Ci Shi, Dan Shen, Tu Fu Ling, Shu Di Huang, Hei (Da) Dou, Nu Zhen Zi, Niu Xi, Xian Mao, Tu Si Zi, Fang Ji, Gou Qi Zi

* INTERNET ADDICTION-TCM

A patent of herbal decoction approved by the China National Intellectual Property Administration (CNIPA)
in 2010 to treat internet addiction specifically.

Herbs - Yun Ling, Qing Ban Xia, Zhu Ru, Dan Shen, Muli, Gou Teng, Shi Gao, Dan Nan Xing, Dang Shen, Long Gu, Gan Cao, Chen Pi, Zhi Qiao, and Qing Meng Shi.

* INTERNET GAMING DISORDER-TCM

Zhu Sha, Fuling and Baiziren not only can nourish the internal metabolic kinetic systems but also help for sedation, which wise mind will help Internet Gaming Disorder patients to get rid of rigid behavioral gaming patterns and narrow cognition from the game.

* JIAN ER PREPARATION

Jian Er Preparation is composed of Huang Qi, Ge Gen, Dan Shen, and Gu Sui Bu. JEP exhibits multifunctional properties such as reduction of blood lipids, prevention of arteriosclerosis, improvement of microcirculation, and reduction of oxidative stress. In the age-related hearing loss model, JEP was shown to decrease the cochlear and auditory cortex malondialdehyde content, lessen mitochondrial DNA damage, and reduce the expression of apoptosis-related protein caspase 3 in cochlear cells, thus protecting against presbycusis119. JEP which has been used for the treatment of patients with Sensorineural hearing loss (SNHL) also has a good clinical ability to protect hearing in humans.

* SOFT TISSUE INJURIES-TCM

Chinese medicine for the treatment of Soft Tissue Injuries synovitis, bursitis and synovial membrane hydrops.

Herbs - Hong Hua, Fu Zi, Cao Wu, Sheng Di Huang, San Qi, Gu Sui Bu, Tou Gu Cao, Bing Pian, Dang Gui, Niu Xi, San Bai Bang, Gan Cao

* XINGSHUIAN PRESCRIPTION

Xingshuian Prescription is used for narcolepsy based on neurobiological mechanism, without convulsive symptoms or orexin deficiency, now known as Narcolepsy Type 2 (NT2). The focus of the present formula is on deficiency in origin and excess in superficiality, where the deficiency in this disease belong to different types The prescription works to tonify deficiency and strengthen, refresh and induce resuscitation. The treatment of narcolepsy with Xingshuian Prescription can significantly improve the clinical signs and symptoms and has a good effect.

Herbs - Xian He Cao, Ma Huang, Ba Ji Tian, Hua Jiao, Mu Gua, Jiang Huang, Niu Huang

* ZUO GU SHEN JING TONG - 做故身经通

Wind-cold-damp bi syndromes with particular issues in the lower back and legs - sciatic pain, heaviness in the lower body, hip and knee pain, arthritis in those areas (osteo or rheumatoid).

Zuo Gu Shen Jing Tong works by dredging the meridians and removing obstructions from the channels while relaxing the tendons and muscles, strengthening the bones and tonifying the Kidneys. Zuo Gu Shen Jing Tong also dispels Cold and Damp. From the perspective of TCM, proper bone development depends on the strength of the Kidney system. Zuo Gu Shen Jing Tong's action of tonifying the Kidneys improves overall vitality and resilience.

Herbs - Ji Xue Teng, Ba Ji Tian, Xi Xian Cao, Shu Di Huang, Yan Hu Suo, Wei Ling Xian, Jiang Huang, Shen Jin Cao, Ru Xiang, Mo Yao, Chuan Xiong

The herbs can be divided into 3 groups according to their functions.

The first group of herbs invigorates Qi and Blood to remove stasis. This group includes the chief herbs of this formula which are Ru Xiang (Boswellia) and Mo Yao (Myrrh). Together, Ru Xiang and Mo Yao strongly invigorate the blood. Yan Hu Suo (Corydalis root) and Chuan Xiong (Szechuan Lovage rhizome) also activate Qi and Blood in the body. Jiang Huang (Turmeric) similarly relieves blood stasis and opens the channel pathways. Also included is Ba Ji Tian (Morinda) which is used to strengthen the sinews and bones and supplement the Liver and Kidney.

The second group of herbs address wind-dampness, open the meridians and relax the muscles and sinews. Xi Xian Cao (Siegesbeckia) and Wei Ling Xian (Clematis root) are

used together especially for this purpose. Shen Jin Cao (Lycopodium) also dispels damp, relaxes the tendons and sinews and opens the channels.

The final group of herbs tonify blood and also relieve discomfort. Ji Xue Teng (Spatholobis stem) not only activates and tonifies the blood but also relaxes the tendons and opens the channels. Shu Di Huang (processed Rehmannia root) tonifies the Kidneys which play an important role in maintaining bone and joint health, especially in the lower back and legs. Shu Di Huang is an important tonifying herb used to nourish blood and Yin.

1.3.3.42 RT-TCM-42

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_42

Cat General Health-TCM, Pesticide Intoxication Sequelae-TCM, She Gan Ma Huang Tang, Shen Yuan Dan, Urticaria #1, Vascular Headache #1, Xinyang Tablet, Yang Deficiency Edema #1, Yue Yin Cha

Recordings Updated in June 2025

* CAT GENERAL HEALTH-TCM

Cat General Health-TCM is Catnip (nepetalactone), Gan Cao, Dang Gui, Ren Shen, Bai Zhu, Valerian root (valerenic acid)

-Catnip nepetalactone triggers feel-good pheromones in their bodies. Can make some cats aggressive or combative.

-Gan Cao is like natural cortisone and has anti-inflammatory properties. It can alleviate your cat's allergies and help with respiratory issues like colds. Gan Cao may also be used for, Liver disease, Skin Health, Hair growth, Digestive issues. Gan Cao could raise blood pressure in cats who already have high blood pressure. It can cause blood sugar problems. Older cats and cats with diabetes should not have it.

-Dang Gui is a blood tonic that cleans the liver and nourishes and detoxifies the blood. It can be used to treat anemia, dry skin, and dizziness. It also helps alleviate the symptoms of certain conditions, such as Shortness of breath, Heat intolerance, Chronic diarrhea, Weight loss, Palpitations, Anxiety, Hyperthyroidism. Blood deficiency syndrome often arises from an inability to process nutrients in the body. Dang Gui can help with this. Dang Gui has also been incorporated into blended herbal formulas for calming down and soothing aches. It promotes smooth muscle relaxation and is

warming to the body system.

-Ren Shen is a warming qi tonic that helps the spleen and stomach. It also enhances the immune system and may help stimulate appetite in kitties experiencing a decreased appetite and weight loss. Some of the other functions of ginseng are that it: Supports blood flow to the heart muscle. Reduces resting blood sugar levels. Improves memory. Boosts energy. There is some anecdotal evidence that animal ginseng can improve physical performance and cognitive function. It has also been related to assisting with adrenal gland function. Practice caution when using ginseng on cats with hypertension or hyperactivity.

-Valerenic acid from Valerian root helps them get energized and motivates them to move around and exercise. Valerenic acid can even help cats with separation anxiety. Some cats who become frightened or startled by loud noises like fireworks or thunder will often chill out when they get a whiff of some valerian root. It helps to decrease stress and anxiety.

-Bai Zhu supports digestive health. It can help treat everything from diarrhea and constipation to abdominal distention. Bai Zhu has many impressive qualities and assists the spleen and stomach. Some of the benefits are that it: Improves immune system. Has anti-inflammatory qualities. Protects the liver. Combats stress. Bai Zhu is also commonly used to treat chronic diarrhea and edema. It is considered a white atractylodes, which is ideal for treating a wide array of stomach ailments. It regulates and balances fluids in the body.
(https://pawsitiveivc.com/blog/chinese-herbal-therapy-for-cats/)

* PESTICIDE INTOXICATION SEQUELAE-TCM

Traditional Chinese medicine preparation for treating sequelae of pesticide intoxication. Pesticides include herbicides, insecticides, nematicides, fungicides...

The preparation helps clearing heat, removing toxicity, promoting diuresis, treating stranguria, tonifying the spleen, regulating the function of the stomach and the like. The medicine treats both manifestation and root cause, functions of the liver and the kidney for expelling toxicity and removing the toxicity can be restored, the medicine can directly act on blood vessels and viscera so as to remove the residual agricultural chemical components from the body, so that the self-regulation functions of a blood system, a digestive system and a respiratory system are restored. The autoimmunity is improved, and through comprehensive treatment, the purposes of the physical equilibrium between yin and yang, the improvement of microcirculation, and the thorough cure for the sequelae of the pesticide intoxication are finally achieved.

Herbs - Lu Dou, Gan Cao, Lian Qiao, Shi Gao, Da Huang, Sheng Ma, Tong Cao, Fang Feng, Bai Zhu, Zhu Ling, Ju Hua, Ge Gen, Huo Xiang, Chen Pi, Niu Huang, Ban Lan Gen, Che Qian Cao, Ren Shen Ye.

* SHE GAN MA HUANG TANG - 射干麻黄汤 - Belamcanda and Ephedra Decoction. Belamcanda and Ma Huang Combination

ACTIONS - Warms the Lungs. Transforms Cold and Thin Mucus lingering in the chest. Descends Qi. Stops cough

SYNDROMES - Wind-Cold with Cold Thin Mucus. Tan Yin. Cough and asthma due to Cold. Retention of Cold-Phlegm in the Lungs

CLINICAL MANIFESTATIONS - Pronounced coughing. Pronounced wheezing. Aversion to Cold. Headache. Rales. Dyspnea. Profuse, clear, watery sputum or. Scanty, clear sputum. A feeling of fullness and a stifling sensation in the chest and diaphragm. Rattling sounds in the throat. Heaviness and pain of the body. Swollen face and extremities. Pale or cyanotic face. No thirst or. Thirst, prefers warm drinks. Body aches. May feel thirsty but prefers warm drinks.

HERBS AND ACTIONS

-She Gan - Transforms Phlegm, clears the Lungs and eliminates wheezing. With Xi Xin, Zhi Ban Xia and Sheng Jiang, for dyspnea and cough with profuse white or clear sputum.

-Ma Huang - Induces sweating, releases the Exterior, disseminates and facilitates Lung Qi, calms wheezing and stops coughing.

-Zi Wan - Relieves coughs and expels Phlegm. With Kuan Dong Hua, for cough and wheezing with copious sputum and rebellious Qi. With Wu Wei Zi, for productive cough, wheezing, and spontaneous sweating.

-Kuan Dong Hua - Moistens the Lungs, descends Qi, stops cough and transforms Phlegm. With Wu Wei Zi and Zhi Ban Xia, for cough and wheezing due to congested fluids.

-Zhi Ban Xia - Dries Dampness and transforms Phlegm.

-Xi Xin - Disperses Wind-Cold and Internal Cold, alleviates pain, warms the Lungs and transforms Phlegm and Thin Mucus. With Ma Huang, alleviates cough and wheezing due to Phlegm caused by Wind-Cold. With Wu Wei Zi, regulates the opening and closing of the Lungs, alleviating cough and calming wheezing for patients with existing thin mucus who are exposed to Wind-Cold leading acute wheezing and coughing of clear thin sputum. With Zi Wan and Kuan Dong Hua, for chronic, persistent cough.

-Wu Wei Zi - Astringes leakage of Lung Qi and stops cough. With Ma Huang and Xi Xin, for cough due to Wind-Cold.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Lungs, stops cough and reduces the toxicity of other herbs. With Da Zao, for External Wind-Cold. With Ma Huang, strongly creates sweating to treat all externally contracted Wind-Cold disorders, especially those in which Wind-Cold has constrained Lung Qi with cough and wheezing and the failure of Lung Qi to descend causing nausea and vomiting.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Severe cough with mild or no Exterior symptoms. Asthma. Chronic bronchitis. Eosinophilia. Asthmatic bronchitis. Dyspnea. Pulmonary emphysema. Pertussis. Adenovirus pneumonia. Chronic obstructive pulmonary disease (COPD). Emphysema.

* SHEN YUAN DAN

Shen Yuan Dan is a Qi tonifying and blood stasis eliminating formulation, shen-yuan-dan (SYD), a commonly used traditional Chinese medicine (TCM), to treat angina pectoris.

Shen Yuan Dan treatment can reduce hypoxia-induced myocardial apoptosis by upregulating miR-24 expression. Acute myocardial infarction (AMI) corresponds to acute ischemic myocardial necrosis. It is a severe coronary heart disease, which is characterized by a drastic reduction or interruption in blood supply to the coronary artery, resulting in severe and long-term ischemia of the corresponding myocardium, culminating in myocardial necrosis. Acute myocardial infarction (AMI) is the leading cause of malignant arrhythmia, heart failure, and sudden death.

Herbs -

-Danshen - Activating blood and removing stasis; inducing menstruation to relieve menalgia; eliminating the heart-fire; cooling-blood.
Inhibiting increase of blood serum level of triglycerides, reversing renal injury induced, reversing cerebral ischemia-reperfusion injury, relieving myocardial ischemia, ameliorating diabetic vascular injury.

-Huangqi - Invigorating Qi for strengthening superficies; diuresis; promoting granulation. Inhibiting myocardial ischemia-reperfusion injury, myocardial hypertrophy, vascular endothelial dysfunction, coronary heart disease, atherosclerosis, cardiac fibrosis, viral myocarditis, and diabetes mellitus, exerting antioxidant activity.

-Dangshen - Tonifying middle-Jiao and Qi; promote the production of body fluid; strengthening spleen; and tonifying lung. Preventing hypoxia-induced platelet activation

and resultant procoagulant state, promoting mouse immune function, inhibiting the development of diet-induced obesity and hyperlipidemia, and relieving myocardial ischemia-reperfusion injury.

-Xuanshen - Removing pathogenic heat from blood; nourishing yin for lowering fire; clearing toxic material, dispersing mass. Reversing heart and cerebral ischemia/reperfusion injury, relieving diabetic nephropathy, inhibiting the ventricular remodeling induced by hypertension, attenuating arteriosclerosis.

-Shuizhi - Broken blood stasis, pursue action of silt, stimulate the menstrual flow. Promoting blood circulation and removing stasis, relieving atherosclerosis, alleviating thrombus burden, improving blood hyperviscosity and related metabolic disorders.

-Dilong - Dredging collaterals, relieving cough and asthma, clearing heat, diuretic. Exerting anti-thrombus, reversing mitochondrial injury and pro-fibrotic events, protecting brain microvascular endothelial cells after oxygen-glucose deprivation/reperfusion.

-Tubiechong - Broken blood stasis, reunion of fractured tendons and bones. Relieving atherosclerosis, exerting antiangiogenesis.

-Yanhusuo - Removing blood stasis; regulating Qi; and relieve pain. Degrading the blood clot and delaying the plasma recalcification time, inhibiting inflammation, myocardial fibrosis, and platelet aggregation, improving the hypercoagulable state.

* URTICARIA #1

ACTIONS - Dispels Wind. Scatters Cold. Harmonizes the Ying and Wei

SYNDROMES - Wind-Cold

CLINICAL MANIFESTATIONS - Urticaria. The rash is itchy and pink or white. Worse with Cold. Better with warmth. Severe chills. Mild or no fever. Headache. Generalized discomfort. Stiff neck and shoulders. Body aches. Joint ache. Nausea. Vomiting. Hiccups. Anhidrosis. Gasping. Stabbing joint pain. Itchy throat. Cough. Asthma. Aversion to Wind and Cold. Maybe low back pain. Maybe frozen shoulder. Maybe dyspnea. Maybe epistaxis (severe).

HERBS AND ACTIONS

-Jing Jie - Releases the Exterior, expels Wind, vents rashes and relieves itching.

-Fang Feng - Releases the Exterior and expels External Wind. With Jing Jie, expels Wind and stops itching for Wind-Cold and pruritic rashes. With Qin Jiao, for Wind Dampness. with Ma Huang, dispels Wind-Cold from the Exterior.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer and warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels. With Ma Huang, for Wind-Cold Excess conditions with fever and chills but no sweat.

-Ma Huang - Induces sweating, releases the Exterior and warms and disperses Cold pathogens.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei. With Gui Zhi, harmonizes the Ying and Wei.

-Qin Jiao - Expels Wind-Dampness, opens the channels and soothes the sinews and collaterals.

-Bai Xian Pi - Clears Damp-Heat and stops itching.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, adjusts the Ying and Wei and normalizes the flow of Qi at the center. With Gui Zhi, strongly induces sweating for treatment of External Wind-Cold with chills, fever, body aches and anhidrosis.

-Fu Ping - Induces sweating, releases the exterior, unblocks the muscle layer, vents rashes and relieves itching. With Ma Huang, for Wind-Edema patterns with swollen face, urinary difficulty and anhidrosis.

-Gan Cao - Moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS - Urticaria.

* VASCULAR HEADACHE #1

ACTIONS - Invigorates the Blood. Promotes the movement of Qi. Expels Wind. Alleviates pain. Extinguishes Wind,. Alleviates spasms. Drains Liver Heat. Pacifies Liver Yang

SYNDROMES - Blood Stagnation with Liver Wind and Heat

CLINICAL MANIFESTATIONS - Dizziness and vertigo to the point of falling over. Headache with a drawing sensation. Numbness and tremor of limbs. Twitching and involuntary writhing of hands and feet. Dysphasia. Unsteady gait. Sudden loss of consciousness. Tongue stiffness with aphasia. Facial paralysis. Hemiplegia.

HERBS AND ACTIONS

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi, expels Wind and alleviates pain.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, nourishes the Blood and calms the Spirit.

-Niu Xi - Invigorates the Blood, expels Blood Stasis, nourishes the Liver and Kidney Yin and descends Blood and Fire.

-Gou Teng - Extinguishes Wind, alleviates spasms, drains Liver Heat, pacifies Liver Yang and releases the exterior.

-Bai Zhi - Expels Wind, eliminates Dampness, unblocks the nasal passages, dispels Cold and alleviates pain. With Chuan Xiong, for headache. With Jiang Can, for frontal headache.

-Jiang Can - Extinguishes Wind and stops spasms and convulsions.

TREATS - Vascular headache.

* XINYANG TABLET

Xinyang tablet (XYT) has been used clinically for heart failure (HF) for over twenty years. XYT is a potential intervention to counter sepsis-induced myocardial dysfunction (SMID) by influencing macrophage autophagy and M2 polarization. XYT attenuates chronic hypoxia-induced right ventricular remodeling via inhibiting cardiomyocytes apoptosis. Hypoxia-induced pulmonary hypertension (HPH) is one of the fatal pathologies developed under hypobaric hypoxia and eventually leads to right ventricular (RV) remodeling and RV failure. XYT exerts protective effects against pressure overload induced myocardial fibrosis (MF), which might be associated with the induction of pyroptosis-mediated MLK3 signaling. XYT alleviated cardiac dysfunction in a cardiac pressure overload model by regulating the RIPK3/FUNDC1-Mitochondrial unfolded protein response and mitophagy.

Herbs - Huang Qi, Yin Yang Huo, Hong Shen, Yi Mu Cao, Mao Dong Qing, Ting Li Zi, Che Qian Zi.

* YANG DEFICIENCY EDEMA #1

ACTIONS - Warms the Kidneys. Promotes diuresis

SYNDROMES - Kidney Yang Deficiency with Water Flooding

CLINICAL MANIFESTATIONS - Edema in the limbs and face. Edema of whole body

particularly at and below the waist after several months of pregnancy. Pitting edema. Lusterless complexion. Low back pain, aching and heaviness. Abdominal distention with full sensations. Oliguria. Cold limbs. Face gray and congested or pale. Feeling nervous and cold with mental weariness. Palpitations. Shortness of breath. Abdominal fullness. Weakness in the waist. In severe cases:. Ascites. Edema of scrotum.

HERBS AND ACTIONS

-Zhi Fu Zi - Warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold and Dampness, warms the channels and stops pain. With Bai Zhu and Fu Ling, for Kidney and Spleen Yang Deficiency with retention of pathogenic water with abdominal pain, which is worse with Cold, urinary difficulty, and deep aching and heaviness in the extremities. With Fu Ling, for lower body edema and dysuria.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold and warms the Middle.

-Fu Ling - Promotes urination, leaches out Dampness and strengthens the Spleen. With Bai Zhu, strengthens the Spleen and resolves Dampness.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness, promotes water metabolism and calms the fetus. With Fu Ling and Sheng Jiang, for edema with Kidney Yang Deficiency.

-Bai Shao - Nourishes the Blood, astringes Yin and adjusts the Ying and Wei.

TREATS - Edema during pregnancy.

* YUE YIN CHA - 悦音茶 - Pleasing Voice Tea

ACTIONS - Disperses Wind-Heat. Benefits the throat. Moistens the Lungs. Resolves Phlegm. Clears Heat. Relieves Fire toxicity. Invigorates the Blood. Transforms Phlegm. Opens the channels

SYNDROMES - Heat and Fire in the throat with Phlegm and Blood Stasis

CLINICAL MANIFESTATIONS - Chronic simple laryngitis: Episodic hoarseness which is most prevalent upon arising in the morning. As the physical activity increases the sound improves. The next morning the hoarseness returns. Over long periods of time there is fatigue of the voice and sound cannot be emitted for an extended period. Throat discomfort and pain upon emitting sounds. There is often a habit of clearing ones throat but no evident sputum is coughed up. The hoarseness is more evident when attempting to make a high pitched sound. Diffuse hyperemia of the laryngeal mucosa. The vocal cords have lost their original pearl white color and turned pink or progressed to a deeper red. The vertical capillaries running parallel to the border of the vocal cords are

enlarged. The border is thickened. The glottis cannot be closed completely, or. The bilateral vibration is not balanced. The exterior of the vocal cords are often covered by a sticky secretion which forms sticky silk - like strands connecting the interglottic space.

Chronic hypertrophic laryngitis: Episodic hoarseness which is most prevalent upon arising in the morning. As the physical activity increases the sound improves. The next morning the hoarseness returns. Over long periods of time there is fatigue of the voice and sound cannot be emitted for an extended period.

Throat discomfort and pain upon emitting sounds. There is often a habit of clearing ones throat but no evident sputum is coughed up. The hoarseness is more evident when attempting to make a high pitched sound. A long history of hoarseness and aphonia. Hoarseness is very evident. Coughing is relatively mild. Occasionally there are acute flare ups causing a further increase in hoarseness and deterioration in the sound quality. Symmetrical swelling of the laryngeal mucosa is observed but the distribution is not even and is more marked in the arythenoid space where it stands out high. When a sound is emitted it forms one or several plica in the arythenoid space. The vocal cord is thickened, appearing like a stick that is rough and not smooth and often takes on a nodular or polypoid form which is covered by a sticky secretion. If the disease progresses to the areas below the glottis, it prevents the vocal cords from uniting and triangular fissures appear. If the disease progresses to the areas below the glottis, it prevents the vocal cords from uniting and triangular fissures appear. The ventricular folds are enlarged and often press on the vocal folds when a sound is emitted. The aryepiglottic fold may also be thickened but enlargement of the epiglottis is extremely rare.

HERBS AND ACTIONS

-Wu Mei - Astringes leakage of Lung Qi, generates fluids and alleviates thirst.

-Ju Luo - Disseminates the flow in the channels and collaterals, promotes the movement of Qi, and transforms Phlegm. It is used for Phlegm stagnating in the channels and collaterals with cough and chest and flank pain and especially for distention in the vessels of the Lung due to rebellion of protective Qi.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain.

-Gan Cao - Moistens the Lungs, resolves Phlegm, clears Heat, relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

-Bo He - Disperses Wind-Heat and cools and clears the head and eyes and benefits the throat.

TREATS - Chronic laryngitis.

1.3.3.43 RT-TCM-43

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_43

Astragalus Immortal Prescription, Co-Herba Houttuyniae Oral Liquid, HemoHIM, Radiation Poisoning TCM, Radioprotection Formula TCM, Wumai Danghuang Oral Liquid, Wuzi Yanzong Pill, Yiqi Jiedu Decoction, Yiqi Yangyin Fang

Recordings Updated in June 2025

* ASTRAGALUS IMMORTAL PRESCRIPTION

This prescription has been shown to elevate the activities of GSH-Px and SOD while suppressing MDA levels in the liver. Furthermore, it protects the liver from radiation induced oxidative damage.

Herbs - Sheng Di Huang, Mai Men Dong, Huang Qi, E Jiao

* CO-HERBA HOUTTUYNIAE ORAL LIQUID

Contains Yu Xing Cao, Ren Shen, Gou Qi Zi. This liquid suppresses the rate of radiation induced chromosomal aberrations. It also enhances the anti-stress ability of mice by improving immune functions. Moreover, Panax ginseng C.A.Mey. and Lycium barbarum L. improve immune functions and inhibit radiation effects by promoting the repair of damaged cells and tissues.

* HEMOHIM

HemoHIM is used to overcome side effects of chemotherapy in patients with cancer. Recent studies have reported that HemoHIM possesses anti-inflammatory, antioxidative, and antidiabetic effects. HemoHIM also suppresses the increased inflammatory cell count and pro-inflammatory cytokines in BALF induced by cigarette smoke (CS) and lipopolysaccharide (LPS) exposure, which was accompanied by a reduction of inflammatory cell infiltration into lung tissue as seen in the histopathology. Furthermore, HemoHIM profoundly decreased the phosphorylation of Erk and the expression of MMP-9 and iNOS in the lung tissue of CS and LPS exposed mice.

Herbs - Dang Gui, Chuan Xiong, Bai Shao

HemoHIM was designed to aid scientists combat daily radiation exposure. Proper

functioning of hematopoiesis is the basis of a healthy immune system. HemoHIM has been clinically tested and proven to strengthen the immune system. HemoHIM can restore balance in our body, ensuring that the functions of our immune system are neither weak nor overly active. It boosts the function of natural killer cells, NK cells, which are immune cells that eliminate harmful cells in our body. Using the metaphor of our army, they are akin to tanks aiding T and B cells in defending our body against infections.

HemoHIM also increases red blood cell production, which creates an oxygen-rich environment where harmful cells cannot survive. The benefits of HemoHIM are manifold and it can be consumed by anyone looking to enhance their immune system or overall health. It is perfect for:

* Individuals working long hours,
* Students needing to stay awake for their studies,
* Elderly people requiring more energy,
* Athletes expending a lot of energy,
* Exhausted homemakers, and so on.

HemoHIM can also improve the health of individuals suffering from issues such as: High cholesterol, High blood pressure, Diabetes, Allergies, Cancers, Constant cold, Arthritis WIH, Gout, Irregular monthly cycle, Chronic inflammatory activities.

* RADIATION POISONING TCM

Actions: Clearing heat and resolving toxins, boost qi and nourish yin, activate blood circulation and remove blood stasis.

Herbs - Huangqin, Huzhang, Huangqi, Gouqizi, Maidong, Jianghuang, Danshen, Ciwujia, Gancao

* RADIOPROTECTION FORMULA TCM

The radioprotective prescription has been shown to improve the survival rate, white blood cell count, thymus index, spleen index, and the DNA content of bone marrow cells thereby reducing radiation induced immune damage in mice models.

Herbs - Huang Qi, Ling Zhi, Gou Qi Zi, Fu Ling

* WUMAI DANGHUANG ORAL LIQUID

Wumai Danghuang Oral Liquid is composed of Wu Wei Zi, Mai Men Dong, Dang Shen, Huang Qi. This prescription exhibits its antiradiation effects by elevating SOD,

degrading MDA and inhibiting the generation of free radicals. In addition, Wumai Danghuang Oral Liquid exhibits protective and repair effect on radiation induced immune injuries.

* WUZI YANZONG PILL

Wuzi Yanzong Pill (WZYZ) is a Chinese herbal prescription that is used as a therapeutic option for male infertility. Clinically, it has significant therapeutic effects on oligospermia and asthenozoospermia. WZYZ improves sperm quality by suppressing DNA damage. A double-blind randomized controlled trial confirmed that WZYZ is an excellent therapeutic option for men with low fertility who cannot be cured by conventional western medicines. Pelvic exposure to radiation reduces testicular weight, sperm quality and leads to testicular oxidative stress and abnormal testicular structure. WZYZ protects against suppressed serum testosterone levels, reduces MDA levels and oxidative stress indices (OSI) in the testis.

Herbs - Gou Qi Zi, Fu Pen Zi, Che Qian Zi, Tu Si Zi, Wu Wei Zi

Wu Zi Yan Zong Wan - 五子衍宗片- Five Ancestors Tea Pills. FORMULA ACTIONS - Tonifies the Kidneys. Nourishes and astringes Jing. Benefits the eyes. Tonifies Kidney Yang. Tonifies the Blood. SYNDROMES - Kidney Qi, Yang and Jing Deficiency. CLINICAL MANIFESTATIONS - General weakness. Sexual dysfunction. Impotence. Premature ejaculation. Male infertility. Frequent urination. Dribbling of urine. Lumbar pain or weakness. Depression. Fatigue and poor memory following ejaculation. Weak bladder. Low sperm count. TREATS - Impotence. Poor erection. Low sexual drive. Premature ejaculation. Impotence caused by panic induced Kidney Deficiency. Lumbar pain or weakness. Fatigue. Chronic prostatitis. Chronic nephritis. Female infertility due to Yang and Jing Deficiencies. Recurrent mouth ulcers. Uterine hypoplasia. Weakness. CONTRAINDICATIONS - Contraindicated during the early stages of acute infection or illness, such as cold or flu.. Contraindicated for conditions due to Damp-Heat. NOTES - This formula is primarily used improving the sperm quality of men. It is also good as a general tonic for aging men.

* YIQI JIEDU DECOCTION

Yiqi Jiedu Decoction is used for injuries caused by radiotherapy. Radiation damage in the testis affects morphological structures, sperm motility rate, sperm count, serum levels of testosterone (T), estradiol (E2), follicle-stimulating hormone (FSH), and luteinizing hormone (LH). YQJD decoction is able to accelerate the recovery of sperm indexes, testosterone, and estradiol levels of sex hormones in mice after irradiation and demonstrated good protective effects on the testis. The Yiqi Jiedu Decoction (YQJD) enhances testicular index, structural recovery of the testis, decreases the apoptotic rate of spermatogenic cells, and maintains spermatogenic functions after irradiation. These results suggest that YQJD plays a protective role by intervening in TLR5 downstream

signaling pathways.

Herbs - Huang Qi, Dang Gui, Gou Qi Zi, Xi Yang Shen, Bai Shao, Shan Zha, Fu Ling, Ma Chi Xian

* YIQI YANGYIN FANG

Yiqi Yangyin Fang this prescription increased the number of bone marrow cells, hematopoietic progenitor cells, and hematopoietic stem cells. It also improved bone marrow suppression after radiation by suppressing intracellular ROS levels.

Herbs - Huang Qi, Ren Shen, Nu Zhen Zi, Mo Han Lian, Dang Gui, Bai Zhu, Fu Ling, Gan Cao

*** NOTE: Other radioprotective formulas,

- Si Wu Tang (see RT-TCM 03), promotes hematopoietic and immune system recovery after irradiation by increasing the number of peripheral white blood cells and bone marrow colony-forming units. Si Wu Tang induces the antioxidant Nrf2 pathway, partially inhibits DNA damage, prevents the activation of nuclear transcription factor activating protein-1 (AP-1) and NF-κB, thereby, inhibiting ionizing radiation-induced damage and o ncogenesis.

- Bu Zhong Yi Qi Tang (see RT-TCM 08), has been shown to significantly elevate periph eral white blood cell counts in mice after irradiation and relieves platelet damage. Furthe r, it suppresses lipid peroxides generated by the accumulation of free radicals and impro ves the hematopoietic microenvironment.

- Xue Bi Jing (see RT-TCM 03) improves the survival rate of irradiated mice by suppress ing ROS production in bone marrow cells and alleviated radiation induced hematopoieti c cell injury.
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7917257/)

1.3.3.44 RT-TCM-44

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_44

Chai Ge Jie Ji Tang, Chin Koo Tieh Shang Wan, Modified Figwort And Thunberg Fritillary Decoction, Perspiration Syndrome-TCM, Spontaneous Perspiration-TCM, Tang Luo Ning, XiongShao Capsule, Xuan Shen Bei Mu Tang, Yi Di Yin

Recordings Updated in June 2025

* CHAI GE JIE JI TANG - 柴葛解肌湯 - Bupleurum and Kudzu Decoction to Release the Muscle Layer. Bupleurum and Pueraria Decoction to Release the Muscle Layer

ACTIONS

Dispels Wind. Releases the muscle layer. Clears Interior Heat

SYNDROMES

Tai Yang - Yang Ming. Wind-Cold turning to Heat

CLINICAL MANIFESTATIONS - Fever and chills with fever increasing and chills decreasing. Headache. Anhidrosis. Stiffness and pain of the extremities. Orbital pain. Eye pain. Shoulder and neck tension. Dry nasal passages. Irritability. Insomnia. Thirst. Epistaxis.

CONTRAINDICATIONS
Contraindicated for those with no Interior Heat. Do not use if the Yang Ming has been already attacked with constipation and abdominal pain. Avoid acrid, oily or spicy foods while taking this formula.

HERBS

-Chai Hu - Disperses Wind-Heat and resolves Phlegm and congestion. With Gan Cao, for Wind-Heat fever.

-Ge Gen - Discharges Exterior conditions, releases the muscles, especially of the neck and upper back, relieves Heat and generates fluids. With Chai Hu, for Exterior patterns where the the chills gradually improve while the fever gradually increases along with stiffening of the neck and upper back and absence of sweating. With Chai Hu, Shi Gao and Huang Qin, for Wind-Heat.

-Qiang Huo - Releases the Exterior, disperses Cold, expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Bai Zhi, for headaches.

-Bai Zhi - Expels Wind, eliminates Dampness, unblocks the nasal passages, dispels Cold and alleviates pain. With Ge Gen, for Wind-Cold trapped at the level of the muscles and interstices. With Huang Qin, for Wind-Heat headache.

-Huang Qin - Drains Fire, detoxifies, cools the Blood and stops bleeding. With Qiang Huo, for Cold-Dampness at the Exterior with Heat in the Interior.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst and clears Excess Heat from the Lungs. With Sheng Jiang, decreases muscular swelling.

-Jie Geng - Opens the Lungs, spreads Lung Qi, expels Phlegm, benefits the throat and opens and raises Lung Qi, directing the effects of other herbs to the upper body. With Gan Cao, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness and pain and swelling of the throat due to Wind-Heat.

-Bai Shao - Nourishes the Blood, Astringes Yin and adjusts the Ying and Wei. With Chai Hu, for flank pain due to Liver Qi Stagnation.

-Gan Cao - Moistens the Lungs, resolves Phlegm, stops cough and moderates and harmonizes the harsh properties of other herbs.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Lungs, stops cough and reduces the toxicity of other herbs. With Da Zao, for External Wind-Cold.

-Da Zao - Moderates and harmonizes the harsh properties of other herbs.

TREATS

Common cold. Influenza. Gingivitis. Conjunctivitis. Tonsillitis. Toothache. Headache. AIDS/HIV. Epidemic viral infection. Upper respiratory tract infection. Fever. High fever. Trigeminal neuralgia. Pneumonia. Neck pain and stiffness. Eye pain.

* CHIN KOO TIEH SHANG WAN

Controls bleeding, removes stagnation of blood and Qi, reduces swelling, relieves pain and soothes the soft tissues of muscles and tendons. Aids the healing of broken bones, sprains and soft tissue injuries. Ideal for sports injuries.

Caution - Not to be taken by pregnant women.

Herbs - Angelica Root -Dang Gui, Notoginseng Root -San Qi, Frankincense Resin -Ru Xiang, Myrrh Resin -Mo Yao, Dragon's Blood Resin -Xue Jie, Carthamus Flower -Hong Hua, ipsacus Rhizome -Xu Duan

* MODIFIED FIGWORT AND THUNBERG FRITILLARY DECOCTION Plus Paniculated Swallow-Wort Root, Cicada Slough And Puncturevine Caltrop Fruit

Treats pathogens accumulated in ear. Itching or itching and pain in one ear or both ears,

and with a strong urge for scratching. There may be a stuffy sensation and whisper ringing in the ear, the ear canal is packed with grey debris attached with yellow-white mold spots. The ear canal looks red and swelling and may drain out thick discharges after removed the debris. The tongue is red and with greasy coating, and the pulse is taut. TCM remedy should aim to disperse wind, detoxify, clear heat and resolve phlegm.

Herbs - Sheng Di, Shu Di, He Shou Wu, Dang Gui, Mu Dan Pi, Xuan Shen, Bai Ji Li, Jiang Can, Hong Hua, Gan Cao, Chan Tui, Di Fu Zi, Ku Shen

* PERSPIRATION SYNDROME TCM

Hyperhidrosis is a disorder of excessive sweating due to the overstimulation of cholinergic receptors on eccrine glands. This disorder is characterized by sweating beyond what the body uses for homeostatic temperature regulation.

Herbs - Ren Shen, Bai Zhu, Da Zao, Huang Lian, Gui Zhi, Fu Ling, Chuan Bei Mu

* SPONTANEOUS PERSPIRATION TCM

Spontaneous perspiration happens mostly in the day and increases during physical activities. Night sweats, as the name suggests, happens mostly at night, especially when the person is sleeping; some people will even be awakened by this type of perspiration.

Herbs - Huang Qi, Bai Shao, Gui Zhi, Fu Ling, Wu Wei Zi, Shan Zhu Yu, Bai Zhu, Wu Bei Zi, Dan Shen, Da Zao

* TANG LUO NING

Tang Luo Ning (TLN) is an effective traditional Chinese medicine for the treatment of Diabetic Peripheral Neuropathy (DPN)

Tang Luo Ning attenuates oxidative and endoplasmic reticulum stress and apoptosis in the experimental DPN models both in vivo and in vitro.

The major pathological features in DPN include axonal atrophy and demyelination. Earlier studies have shown that TLN can reduce apoptosis induced by mitochondrial damage in a high glucose environment. TLN also improves mitochondrial function and diminishes Schwann cell dysfunction.

Sciatic motor nerve conduction velocity and digital sensory nerve conduction velocity were reduced in DPN and were significantly improved by TLN.

Herbs - Huangqi, Danshen, Jixueteng, Mugua, Gouji, Chishao, Niuxi and Yanhusuo

* XIONGSHAO CAPSULE

XiongShao capsule ameliorates streptozotocin-induced diabetic peripheral neuropathy in rats via inhibiting apoptosis, oxidative-nitrosative stress and advanced glycation end products.

XSC has been beneficial in preventing restenosis after percutaneous coronary intervention in patients with coronary heart disease in certain aspects.

Herbs - Chi Shao, Chuan Niu Xi, Chuan Xiong, Di Gu Pi, Fang Feng, Gui Zhi, Hai Zao, Huang Jing, Huang Qi, Sang Zhi, Da Ji, and Wa Song

* XUAN SHEN BEI MU TANG - 玄參貝母 - Figwort and Thunberg Fritillary Decoction

Syndromes - Blood and qi deficiencies

Treats - Intermittent itching inside the ear, the outer ear looks dry and shrunken, and the skin of outer ear and ear canal is rough and flaky. The tongue is pale, and the pulse is taut. TCM remedy should aim to replenish qi and blood, extinguish wind and moist dryness.

Indications: Itchy ear with hot sensation and discharges, due to phlegm and fire irritations.

Herbs - Fang Feng, Bai Zhi, Man Jing Zi, Huang Bai, Tian Ma, Gan Cao, Fu Ling, Zhe Bei Mu, Tian Hua Fen, Ban Xia, Xuan Shen

* YI DI YIN

This is a tonic with a lot of blood movers. Be careful if using comadin or other Western Prescribed herbs. May be careful with Viagra and other ED medications. Liu Wei Di Huang is an often used and popular formula. The addition of Suo Yang and Yin Yang Huo are warm and hot herbs to stoke the fire which may have diminished in older age in both women and men.

Improves Erectile Dysfunction in Diabetic Patients

Herbs - Sheng Di, Shan Zhu Yu, Shan Yao, Ze Xie, Fu Ling, Suo Yang, Yin Yan Huo, Mu Dan Pi, Dan Shen, Hua Niu Xi, Tu Si Zi, Tai Zi Shen, E Zhu, Chen Pi

1.3.3.45 RT-TCM-45

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_45

Danshen Chuanxiongqin Injection, Dao Tan Tang, Feng Jiao, Jia Wei Xuan Bi Tang, Lian Qiao Bai Du Pian, Ren Shen Yang Rong Tang, Shen Jin Gui Zhi Shao Yao Zhi Mu Tang, Si Wu Tang He Liu Wei Di Huang Wan Jian Jian, Tian-Huang Formula

Recordings Updated in June 2025

* DANSHEN CHUANXIONGQIN INJECTION

Danshen Chuanxiongqin Injection is a TCM preparation composed of the extract of Salvia miltiorrhiza Bunge (Danshen) and Conioselinum anthriscoides (Chuanxiong). The injection was listed in 2004 and is currently included in « Guidelines on the Rational Use of Chinese Drugs in Ischemic Stroke » as a recommended medication for the treatment of cerebral infarction and coronary heart disease.

* DAO TAN TANG - 導痰湯 - Guide Out Phlegm Decoction. The Phlegm Resolving Decoction. Conduct Phlegm Decoction

ACTIONS - Dries Dampness. Clears Phlegm. Promotes Qi movement. Relieves Stagnation

SYNDROMES - Phlegm Confuses the Heart Orifice. Collapse due to Phlegm. Fainting from Wind-Phlegm. Phlegm Stagnation in the chest and diaphragm

CLINICAL MANIFESTATIONS - Fainting. Vertigo. Headache. Accumulation of congested Fluids that won't dissipate. Vomiting. Stifling sensation of chest and diaphragm. Distention of chest and diaphragm. Distention and fullness of hypochondria and flanks. Dizziness. Palpitations. Nausea. Restlessness when sitting or lying down. Coughing and wheezing. Copious sputum. Thick, gummy nasal discharge and saliva. Difficult breathing. Reduced appetite

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Yin Deficiency or Heat.

HERBS AND ACTIONS

-Ju Hong - Dries Dampness, transforms Phlegm, harmonizes the Middle Jiao and

regulates Qi (more drying and aromatic than Chen Pi). With Ban Xia, for viscous sputum due to Phlegm-Damp Obstruction. With Sheng Jiang, for vomiting and hiccups due to Stomach Qi Disharmony.

-Ban Xia - Dries Dampness, transforms Phlegm, descends rebellious Qi, harmonizes the Stomach, stops vomiting and reduces distention. With Ju Hong, for Stomach Qi Disharmony with epigastric and abdominal distention or pain.

-Fu Ling - Strengthens the Spleen, harmonizes the Middle Jiao, transforms Phlegm and dries Dampness. With Ban Xia, Ju Hong and Sheng Jiang, for congested Fluids in the Stomach manifesting as nausea and vomiting.

-Gan Cao - Tonifies the Spleen, augments Qi, resolves Phlegm and harmonizes (this herb does not appear in every version).

-Zhi Shi - Breaks up stagnant Qi, reduces accumulation, transforms Phlegm and reduces distention. With Ju Hong, strengthens the Middle Jiao.

-Tian Nan Xing - Disperses Wind-Phlegm in the channels, dries Dampness and expels Phlegm. With Ban Xia, Ju Hong, and Zhi Shi, for Phlegm-Damp Obstruction.

-Sheng Jiang - Warms the Lungs and transforms Phlegm.

TREATS

Chronic tracheitis. Chronic bronchitis. Emphysema. Goiter. Obesity. Meniere's disease. Glaucoma. Insomnia. Dizziness. Stomach cancer. Esophageal spasm. Trigeminal neuralgia. Asthma. Hyperthyroidism. Nausea/Vomiting. Anorexia. Forgetfulness. Dyspnea. Sore throat. Amenorrhea. Epilepsy. Schizophrenia. Depression. Coma. Pleurisy. Headache. Cough. Vertigo. Pyloric spasm. Esophageal cancer. COPD. Parkinson's disease. Obesity. Myasthenia gravis. Cervical spondylosis. Palpitations. Hemiplegia.

* FENG JIAO

Feng Jiao is bitter, pungent, cold; spleen and stomach meridians entered. Furthermore Feng Jiao (propolis) is warm in nature. This means that Feng Jiao tends to help people who have too much 'Cold' in their body. Feng Jiao also tastes pungent. Pungent ingredients tend to promote the circulations of Qi and Body Fluids.

ACTIONS
Softens hard skin and tissues. Reduces inflammation and eases pain. Strengthens the immune system and the body, relieves consumptive thirst, eliminates blood-fat; removes toxicity and resolves swelling, astringes to promote tissue regeneration.

INDICATIONS
Calluses. Burns. Scalds. Mouth ulcers. Stomach ulcers. Cervical ectropion. Skin fissures. Premature senility. Hyperlipidemia. Diabetes. Chapped skin.

CAUTIONS
It is contraindicated to those who suffer from allergies.

* JIA WEI XUAN BI TANG - 加味宣痺湯 - Modified Disband Painful Obstruction Decoction

ACTIONS - Clears Heat. Eliminates Dampness. Invigorates the collaterals. Stops pain

SYNDROMES - Bi Syndrome due to Damp-Heat in the Channels and Collaterals. Wei Syndrome due to Accumulation of Damp-Heat

CLINICAL MANIFESTATIONS - Heat and pain in the joints and muscles. Severe limitation of movement. Fever and shaking chills. Lusterless yellow complexion. Scanty, dark urine. Pain worse on cloudy or rainy days. Arthralgia involving one or several joints. Local redness and Heat of the extremities. Swelling with excruciating pain. Pain better during the day and worse at night. Numbness of the muscles. Thirst. Dryness of the mouth. Irritability. Muscular atrophy. Restlessness. Anorexia. Desire for Cold drinks. Loose stools. Aversion to Heat. Fullness of the chest. Pain improved with Cold and worse with Heat. Muscular swelling. Muscle redness. General heaviness.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Bi Syndrome due to Wind-Cold-Damp. Contraindicated for those with Wei Syndrome not caused by Damp-Heat.

HERBS AND ACTIONS

-Han Fang Ji - Expels Wind-Dampness, purges Damp-Heat, alleviates pain, promotes urination and reduces edema. With Yi Yi Ren and Can Sha, for Wind-Damp Bi and Wind-Damp-Heat Bi.

-Xing Ren - Regulates the Lung's water metabolism function.

-Yi Yi Ren - Promotes urination, strengthens the Spleen, clears Heat, expels Wind-Dampness, soothes numbness and clears Damp-Heat. With Can Sha, strengthens the Spleen, resolves Dampness and treats painful obstruction.

-Can Sha - Dispels Wind Dampness, harmonizes the Stomach and transforms turbid Dampness. With Han Fang Ji, Yi Yi Ren and Lian Qiao, for Damp-Heat Bi and Wind-Damp Bi.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, and reduces

swelling. With Can Sha, dries Dampness and eliminates turbidity.

-Lian Qiao - Clears relatively superficial Heat.

-Zhi Zi - Clears Heat, eliminates irritability, drains Damp-Heat and reduces swelling. With Hua Shi, Lian Qiao and Chi Xiao Dou, assists in clearing Heat and draining Dampness through the urine.

-Hua Shi - Promotes urination and expels Damp-Heat.

-Chi Xiao Dou - Promotes urination, clears Heat, clears Damp Heat and reduces swelling.

-Jiang Huang - Invigorates Blood, promotes movement of Qi, alleviates pain and expels Wind.

-Hai Tong Pi - Expels Wind-Dampness, unblocks the channels, clears Heat, promotes urination and reduces edema.

-Sang Zhi - Dispels Wind-Dampness especially in the upper extremities, unblocks the channels, benefits the joints, stops spasms, regulates water metabolism and reduces edema.

TREATS

Rheumatic fever. Rheumatoid arthritis. Gouty arthritis. Connective tissue disorders. Arthralgia. Subacute lupus erythematosus. Guillain-Barre syndrome. Fever. Rheumatic arthritis. Rheumatic Heart disease. Erythema arthriticum. Mononeuropathy. Brachial neuritis. Polyneuritis. Myasthenia gravis. Osteoarthritis.

* LIAN QIAO BAI DU PIAN - 连翘败毒片 - Forsythia Fruit Tablet for Removing Toxin. Forsythia Expelling Poison Tablet

ACTIONS - Clears Heat. Relieves toxicity. Alleviates pain. Cools the Blood. Stops itching

SYNDROMES - Toxic Wind-Heat

CLINICAL MANIFESTATIONS - Localized itching, redness, swelling, heat, inflammation or suppuration of the skin. Fever. Headache. Thirst. Sore throat. Dry throat. Constipation.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated during pregnancy.

HERBS AND ACTIONS

-Lian Qiao - Clears Heat (especially in the Upper Jiao), relieves toxicity, reduces abscesses, dissipates clumps and clears Blood Heat. With JIn Yin Hua, for initial-stage Wind-Heat.

-Jin Yin Hua - Clears Heat, resolves Fire toxicity, cools the Blood and vents and disperses External Wind-Heat. With Huang Qin, for suppurating boils that have not ulcerated, or have ulcerated but are not discharging pus. With Lian Qiao and Huang Qin, for unremitting high fever.

-Da Huang - Drains Heat, purges accumulations, invigorates the Blood, dispels Blood Stasis and reduces Fire toxicity. With Zhi Zi, Huang Qin and Lian Qiao, for strong pathogenic Heat in the Upper and Middle Jiaos.

-Zhi Zi - Clears Heat, reduces Fire, eliminates irritability, Drains damp-Heat, cools the Blood, relieves toxicity, reduces swelling and activates the Blood. With Lian Qiao, for Heat entering the Pericardium.

-Huang Qin - Clears Heat, dries Dampness, drains Fire, cools the Blood and detoxifies. With Zhi Zi, powerfully clears and drains lurking Heat from the Lungs with fever, fullness in the chest, cough with yellow sputum and epistaxis or hematemesis and sores due to Heat toxin.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, clears Heat, cools the Blood, reduces swelling from sores and abscesses and relieves pain.

-Bai Xian Pi - Clears Heat, resolves Fire-toxicity, expels Wind, dries Dampness and stops itching.

-Fang Feng - Releases the Exterior, expels External Wind, expels Wind-Dampness and alleviates pain.

-Chan Tui - Disperses Wind, clears Heat, vents rashes and relieves itching.

TREATS

Abscess (early stage). Early-stage painful skin infection (with incomplete expression of rash). Urticaria. Furuncle (early stage). Psoriasis. Skin allergy.

* REN SHEN YANG RONG TANG - 人參養榮湯 - Ginseng Decoction to Nourish Luxuriance. Ginseng Decoction to Nourish the Nutritive Qi. Ginseng Nutri Combination. Ginseng Nutritive Combination. Ren Shen Yang Yong Tang. Ren Shen Yang Ying Tang. Nutrient System Nourishing Decoction with Ginseng

ACTIONS - Tonifies Qi. Nourishes the Blood. Warms Yang. Strengthens the Spleen and Lungs. Nourishes the Heart. Calms the Shen

SYNDROMES - Qi, Yang, and Blood Deficiency. Heart and Spleen Qi and Blood Deficiency due to overexertion. Chronic non-healing sores

CLINICAL MANIFESTATIONS - Amnesia. Palpitations. Feverishness. Anorexia. Emaciation. Pale face. Insomnia. Dyspnea on mild exertion. Fatigue. Shortness of breath. Weight loss. Dry skin. Dry mouth. Dry throat. Dry lips. Uterine bleeding. Irregular menstruation. May suddenly lose consciousness. Slack jaw. Restless at night. Lassitude. Tendency toward being frightened easily. Weakness. Sallow complexion. Dizziness. Tremors in the limbs. Spontaneous perspiration. Fever and severe chills. General debility. Mental instability. Coughing and gasping. Night sweats. Amnesia. Diarrhea. Turbid urine. Nocturnal emission. Impotence. Constipation. Feeble breathing. Tired limbs.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Qi and Blood Deficiency patterns accompanied by symptoms of pronounced Cold.

HERBS AND ACTIONS

-Ren Shen - Strongly tonifies source Qi, augments Qi of the Lung, Spleen and Heart, calms the Shen, generates Body Fluids and relieves fatigue. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Gan Cao and Fu Ling, for Spleen and Stomach Qi Deficiency with Dampness with anorexia, diarrhea, vomiting, abdominal distention and fatigue. With Shu Di Huang, for severe Qi and Blood Deficiency due to loss of Blood and Qi and Yin Deficiency. With Huang Qi, for Lung Qi Deficiency and Qi Deficiency with general debility, anorexia, and spontaneous sweat. With Shu Di Huang, Bai Zhu, Bai Shao and Fu Ling, for Qi and Blood Deficiency.

-Huang Qi - Strengthens the Spleen, tonifies Qi and Blood , generates Body Fluids, raises the Yang Qi of the Spleen and Stomach, tonifies the Lungs, and generates flesh. With Ren Shen or Dang Shen , for Qi Deficiency with general debility, anorexia, and spontaneous sweat. With Bai Zhu, for Spleen Qi Deficiency with weakness, lassitude and loose stools. With Dang Gui, for Blood Deficiency due to hemorrhage with fatigue, low grade fever, irritability and thirst in patients with a weak pulse due to Qi and Blood Deficiency and Qi and Blood Stagnation with chronic non-healing sores, numbness, painful obstruction and paresthesia. With Dang Gui and Rou Gui, for fiat sores that do not pustulate or ulcers that do not heal. With Dang Gui, Shu Di Huang, Ren Shen, Bai Zhu and Rou Gui, for flat chronic sores and non-healing ulcers.

-Bai Zhu - Tonifies the Spleen, tonifies Qi and dries Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Fu Ling - Benefits the Spleen by draining Dampness. With Ren Shen and Bai Zhu, for weak and deficient Spleen with fatigue, anorexia and loose stools. With Gan Cao, for

Spleen and Heart Deficiency causing facial edema, palpitations, and shortness of breath.

-Dang Gui - Tonifies Blood, regulates the menses, invigorates and harmonizes the Blood, disperses Cold, moistens the Intestines, unblocks the bowels, reduces swelling, expels pus, generates flesh and alleviates pain. With Huang Qi, for pallor, debility, fatigue and/or low grade fever due to excessive Blood loss and ulcerated abscesses with insufficient drainage or which drain a clear thin discharge. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Shu Di Huang, and Rou Gui to expel pus and generate flesh in chronic non- healing sores. With Bai Shao, regulates and harmonizes Qi and Blood for Blood Deficiency Heat. With Huang Qi, Shu Di Huang, Rou Gui, and Ren Shen, expels pus and generates flesh in chronic non-healing sores.

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin. With Dang Gui and Bai Shao, for dizziness, palpitations, insomnia and menstrual dysfunction due to Blood Deficiency. With Ren Shen, for Qi, Blood and Yin Deficiency. With Ren Shen, Bai Zhu, Fu Ling, Dang Gui and Bai Shao, for anemia with fatigue and weakness.

-Bai Shao - Calms Liver Yang, alleviates pain, Nourishes the Blood, regulates menstruation and astringes Yin. With Dang Gui, nourishes the Blood and softens the edginess that results from Liver Stagnation. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach and epigastric, hypochondriac or flank pain. With Ren Shen and Huang Qi, restrains sweating from Deficiency. With Ren Shen, Huang Qi and Bai Zhu, for menstrual disorders with Qi Deficiency signs such as fatigue, weakness, and pale and scanty menstrual Blood.

-Chen Pi - Regulates Qi, tonifies the Spleen (improves its transportive functions), adjusts the Middle, dries Dampness, descends Rebellious Qi and helps prevent Stagnation from tonic herbs. With Bai Zhu, for anorexia and other symptoms of Damp Obstruction due to Spleen Deficiency and prevents bloating. With Sheng Jiang, for vomiting and hiccups due to Disharmony of the Stomach Qi. With Bai Zhu, for anorexia and other symptoms of Damp-Obstruction due to Spleen Deficiency.

-Yuan Zhi - Calms the Spirit and sedates the Heart and clears the channel joining the Heart and Kidney, reduces abscesses and dissipates swellings.

-Wu Wei Zi - Replenishes Qi, astringes leakage of Lung Qi, nourishes Kidney Yin, astringes essence, stops diarrhea, astringes sweat, generates fluids, tonifies the Heart and calms the Shen. With Huang Qi, for Yang Deficiency with spontaneous sweat.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood, calms the Spirit and moderates and harmonizes the harsh properties of other herbs. With Sheng Jiang, protects the Spleen and Stomach and harmonizes. With Ren Shen, Bai

Zhu and Fu Ling, for weakness and lassitude due to Spleen and Stomach Deficiency. With Sheng Jian, alleviates epigastric pain, nausea, and vomiting by strengthening the Spleen and enhances the effects of other Qi and Blood tonifying herbs by facilitating their digestion and absorption.

-Rou Gui - Warms the Kidneys, Spleen and Heart, strengthens the Yang and Ming Men Fire, disperses deep Cold, warms the channels, unblocks the channels and vessels, alleviates pain and assists the generation of Qi and Blood. With Ren Shen and Shu Di Huang, for palpitations and shortness of breath due to Deficiency of the Heart and Kidneys. With Huang Qi and Dang Gui, for Yin-type boils due to Qi and Blood Deficiency especially those that form but do not ulcerate.

-Shen Jiang - Warms the Middle and stops vomiting and reduces the toxicity of other herbs.

-Gan Cao - Tonifies the Spleen and augments Qi, assists in tonifying source Qi and moderates and harmonizes the harsh properties of other herbs. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency and palpitations due to Heart Qi Deficiency. With Ren Shen, relieves palpitations and anxiety.

TREATS

Postpartum illness. Post-illness weakness. Tuberculosis. Pleurisy. Depression. General debility due to prolonged external injury. Consumptive disorders. Chronic non-healing sores. Anemia. Chronic fatigue syndrome. Insomnia. Raynaud's disease. Syncope. Infertility. Uterine bleeding. Breast cancer. Rheumatic Heart disease. Tuberculous abscess. Mastitis. Cough. Hay fever. Hypoglycemia. Food allergies. Candidiasis. Numbness. Alzheimer's disease. Anorexia. Dizziness. Weakness. Dysmenorrhea. Idiopathic thrombocytopenic purpura. Paralysis. Spontaneous perspiration. Irregular menstruation. Spermatorrhea. Dermatitis. Constipation. Chemotherapy for breast cancer. Thrombophlebitis. Diminished visual acuity associated with AIDS/HIV. Varicose veins of the lower legs. Delayed menstruation. Chronic weakness. Thinness. Amnesia. Impotence. Baldness. Blood dyscrasia. Nervous exhaustion. Emaciation. Connective tissue diseases. Amenorrhea. Nephritis. Irregular menstruation. Chronic hepatitis. Viral hepatitis. Lung cancer. Gastric ulcer. Carbuncle. Chronic dacrystitis. Optic atrophy. Chronic Kidney failure. Somnolence. Narcolepsy. Paresthesia. Senile dementia. Systemic lupus erythematosus. Tinnitus. Palpitations. Fatigue. Gasping. Headache. Jaundice. Night sweats. Hemilateral sweating. Scleroderma. Nocturnal emissions. Dyspnea. Dry skin. Leukopenia.

* SHEN JIN GUI ZHI SHAO YAO ZHI MU TANG - 伸筋桂枝芍藥知母湯 - Lycopodium, Cinnamon Twig, Peony and Anemarrhena Decoction. Bamboo Pearls

ACTIONS - Alleviates pain in the joints and extremities. Dispels Wind-Damp. Warms the channels. Dispels Stagnation. Opens blocked collaterals. Calms the Shen. Clears Heat.

Nourishes Yin. Clears Yin Deficiency Heat

SYNDROMES - Wind-Dampness with Yin Deficiency Heat

CLINICAL MANIFESTATIONS - Inflammation, swelling, pain, numbness and degeneration in the joints, sinews, and connective tissues. Dizziness. Tinnitus or deafness. Poor memory. Aching, soreness or weakness of the low back. Spermatorrhea or. Premature ejaculation. Aching in the bones. Aching in the leg and heel. Dry mouth. Thirst. Night sweats. Five Sole Heat. Malar flush. Low grade fever in the afternoon. Dry throat, maybe recurrent sore throat. Dry stools and/or. Constipation. Urine short and red. Heightened libido. Maybe insomnia. Maybe frequent dreams. Maybe blurred vision.

HERBS AND ACTIONS

-Shen Jin Cao - Dispels Wind, eliminates Dampness, relaxes the sinews, invigorates the collaterals and invigorates the Blood.

-Sang Ji Sheng - Tonifies Liver and Kidney Yin, strengthens the sinews and bones and expels Wind-Dampness.

-Wu Jia Pi - Dispels Wind-Dampness, nourishes and warms the Liver and Kidneys, strengthens sinews and bones, transforms Dampness and reduces swelling.

-Gui Zhi - Releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, warms the channels and collaterals, relieves pain, unblocks Yang, transforms Qi and thin mucus, assists Heart Yang, warms and facilitates the flow of Yang Qi in the chest, warms and facilitates the flow of Qi through the channels and collaterals and Blood through the vessels, warms the Middle and descends Turbid Yin. With Bai Shao, expels External Wind-Cold and warms and tonifies the Middle Jiao. With Zhi Fu Zi, for chills and painful extremities due to Yang Deficiency with Wind-Cold-Damp Bi.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, softens the Liver and relieves pain. With Gan Cao, regulates the relationship between the Liver and Spleen and nourishes the sinews. With Fang Feng and Bai Zhu, for Painful diarrhea and borborygmus. With Gui Zhi, harmonizes the Ying and Wei.

-Zhi Mu - Clears Heat, drains Fire from the Lungs and Stomach, nourishes Yin, moistens Dryness, generates Fluids, clears Deficiency Fire and quenches thirst. With Gan Cao, regulates Cold and Heat, harmonizes the Exterior and Interior and treats malarial diseases with Tai Yin turbid Dampness fuming upward.

-Sheng Jiang - Releases the Exterior, induces perspiration, disperses Cold, warms the Middle, stops vomiting, warms the Lungs, stops cough, adjusts the Ying and Wei, normalizes the flow of Qi at the center and reduces the toxicity of the other herbs. With Gui Zhi, strongly induces sweating for External Wind-Cold with chills, fever, body aches

and anhidrosis and warms and dispels thin mucus in the Stomach for nausea, hiccup, Stomach pain, acid reflux and/or vomiting of clear fluid.

-Bai Zhu - Tonifies the Spleen, augments Qi, Dries Dampness and promotes water metabolism.

-Fang Feng - Expels Wind-Dampness, expels Internal Wind, stops spasms, relieves diarrhea, stops bleeding and alleviates pain.

-Fu Zi - Warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold and Dampness, warms the channels and stops pain. With Bai Zhu, for Wind-Damp Bi and Spleen Yang Deficiency with a cold, painful abdomen, vomiting and watery diarrhea.

-Di Long - Clears Heat and unblocks and promotes movement in the channels and collaterals.

-Gan Cao - Tonifies Qi, moistens the Lungs, resolves Phlegm, stops cough, clears Heat, relieves Fire toxicity, moderates spasms, alleviates pain, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Bai Shao, moderates spasms and alleviates pain, for painful spasms of the leg or abdomen.

TREATS - Gu syndrome

* SI WU TANG HE LIU WEI DI HUANG WAN JIAN JIAN - 四物汤和六味地黄丸加減 - Benefit Metal Decoction. Metal Pearls

ACTIONS - Cools the Blood. Extinguishes Wind. Nourishes Yin. Protects the hair

SYNDROMES - Blood Heat Generating Wind

CLINICAL MANIFESTATIONS - Sudden hair loss. Rapidly evolving into large round or oval bare patches. Occasional itching. Maybe loss of hair in the eyebrows, moustache and beard. Maybe a sensation of Heat in the scalp. Maybe irritability. Maybe irascibility. Maybe restlessness

HERBS AND ACTIONS

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes Yin and generates fluids. With Mu Dan Pi, for Kidney Yin Deficiency. With Ce Bai Ye, for all types of bleeding due to Heat in the Blood.

-Nu Zhen Zi - Nourishes and tonifies the Liver and Kidney Yin and clears Deficiency Heat.

-Sang Shen - Tonifies the Blood, enriches Yin and generates Fluids.

-Mu Dan Pi - Clears Deficiency Fire.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis, Clears Heat and cools the Blood. With Mu Dan Pi, cools the Blood and disperses Stasis.

-Bai Shao - Nourishes the Blood, astringes Yin and calms Liver Yang and Liver Wind. With Dang Gui, nourishes Yin and Blood.

-Shan Zhu Yu - Stabilizes the Kidneys, astringes Jing and Body Fluids, tonifies Liver and Kidney Yin and strengthens Kidney Yang.

-Xuan Shen - Clears Heat, cools the Blood, nourishes Yin, drains Fire and relieves toxicity. With Mu Dan Pi, for erysipelas and purplish rashes. With Sheng Di Huang, for Excess or Deficiency Heat patterns.

-Hei Zhi Ma - Nourishes and fortifies Liver and Kidney Yin, nourishes Jing and Blood and extinguishes Wind.

-Tu Si Zi - Nourishes Yin, astringes Jing, benefits the marrow and tonifies the Kidneys and Liver.

-Fu Shen - Quiets the Heart, calms the Spirit and soothes the nerves.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Bai Shao, for Blood Deficiency Heat.

-Ce Bai Ye - Cools the Blood and promotes hair growth.

-Dai Zhe Shi - Calms the Liver, anchors Floating Yang, clears Liver Fire and cools the Blood.

TREATS - Alopecia

* TIAN-HUANG FORMULA

Tian-Huang formula (THF) is a patented and clinically approved Chinese medicinal prescription with hypolipidemic effects.

Herbs - San Qi, Huang Lian

1.3.3.46 RT-TCM-46

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_46

Jian Yang Dan, JinChan YiShen TongLuo Formula, Li Jin Tang, San Zi Yang Qin Tang, Shenqi Compound, Wang Yi Jian, Xuan Bi Tang, Yu Zhen San, Zhi Shi Xiao Pi Wan

Recordings Updated in June 2025

* JIAN YANG DAN - 建陽丹 - Build Yang Pills. Vitality Pearls

ACTIONS - Tonifies the Spleen, Lungs and Kidneys. Warms Yang

SYNDROMES - Yang Deficiency

CLINICAL MANIFESTATIONS - Chills. Cold limbs. Inability to get warm. Loose stools. Profuse clear urine. Spontaneous sweating. Lassitude.

HERBS AND ACTIONS

-Fu Zi - Warms Ming Men Fire, assists Heart, Kidney and Spleen Yang, disperses Cold and Dampness, warms the channels and stops pain. With Gan Jiang, warms the Spleen and Kidneys, benefits Yang, disperses Cold, counteracts the Internal consequences of an External Wind-Cold attack, treats overabundance of Yin fluids due to Deficiency Cold and Cold-Damp Bi. With Gan Jiang and Gan Cao, for cold extremities and diarrhea with undigested food due to Collapse of the Spleen and Kidney Yang. With Bai Zhu, for Spleen Yang Deficiency with a Cold, painful abdomen, vomiting and watery diarrhea and Wind-Damp Bi. With Gan Jiang and Bai Zhu, for Internal ascendance of Yin Cold leading to lack of arousal of Spleen Yang with abdominal pain and Cold with watery diarrhea.

-Bai He - Nourishes Stomach Yin, harmonizes the Middle Jiao, moistens the Lungs, clears Heat, stops cough, clears the Heart and calms the Spirit.

-Huang Jing - Tonifies Spleen Qi, nurtures Stomach Yin, moistens Lung Yin, tonifies the Kidneys and strengthens Jing.

-Ci Wu Jia - Tonifies the Spleen and Stomach Qi to aid transformation and transportation, warms the Kidneys to aid Yang in warming the Spleen, augments Heart Qi, calms the Shen, invigorates the Blood and unblocks the collaterals.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness, stabilizes the Exterior and stops sweating.
With Gan Jiang, eliminates Cold Dampness in the Spleen with loss of taste, a sticky

sensation in the mouth, nausea, vomiting, diarrhea and a thick, white tongue coat, treats bleeding due to Deficiency of Spleen Yang with hemafecia or hematuria and frequent diarrhea due to Spleen and Stomach Deficiency Cold.

-Gan Jiang - Warms the Middle, expels Cold, dispels Wind-Dampness seeping into the Lower Jiao, rescues Devastated Yang, expels Interior Cold, warms the Lungs, transforms thin mucus, warms the channels,unblocks the pulse and stops bleeding. With Huang Lian, for epigastric pain and distention, dysentery, indeterminate gnawing hunger, vague abdominal pain or discomfort, belching, and nausea. With Gan Cao, for epigastric pain and vomiting due to Spleen and Stomach Deficiency Cold.

-Yin Yang Huo - Tonifies the Kidneys, strengthens Yang, dispels Wind-Cold-Dampness, warms and unblocks the flow of Yang Qi and strengthens the sinews and bones.

-Bu Gu Zhi - Tonifies the Kidneys, strengthens Yang, stabilizes Jing, tonifies and warms Spleen Yang and stops diarrhea.

-Gan Cao - Tonifies the Spleen, augments Qi, moistens the Lungs, resolves Phlegm, stops coughing, clears Heat, relieves Fire toxicity, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

-Huang Lian - Clears Heat, drains Dampness, drains Fire, resolves Fire toxicity and stops bleeding.

TREATS - Gu syndrome.

* JINCHAN YISHEN TONGLUO FORMULA

JinChan YiShen TongLuo (JCYSTL) Formula ameliorates mitochondrial dysfunction and apoptosis in diabetic nephropathy through the HIF-1α-PINK1-Parkin pathway.

TCM believes that the core pathogenesis of DN is kidney deficiency and collateral obstr uction," and JCYSTL has the effect of tonifying kidney and clearing collateral," thus allev iating the damage to kidney structure and function caused by diabetes.

The JCYSTL formula is a decoction of eight Chinese herbal medicines: Dong Chong Xia Cao, Huang Qi, Xuan Shen, E Zhu, Jiang Can, Shui Zhi, Gui Jian Yu, Niu Xi

* LI JIN TANG - 利金湯 - Benefit Metal Decoction, Metal Pearls

ACTIONS - Descends Lung and Large Intestine Qi. Transforms Phlegm. Clears Heat. Detoxifies. Promote the flow of Qi. Invigorates the Blood. Regulates fluid metabolism in Upper and Middle Jiaos. Resolves Toxins. Nourishes Lung Yin. Calms the Shen

SYNDROMES - Phlegm-Heat

CLINICAL MANIFESTATIONS - Cough with sticky, yellow, difficult to expectorate sputum. Rapid breathing with a harsh voice. Restless fever. Sore throat. Constipation. Dry stools. Mania. Shortness of breath. Dyspnea. Nausea. Vomiting. Chest and/or epigastric fullness. Pain in the ribs.

HERBS AND ACTIONS

-Bai He - Nourishes Stomach Yin, harmonizes the Middle Jiao, moistens the Lungs, clears Heat, stops coughing, clears the Heart and calms the Spirit. With Hua Shi, for dark urine and dysuria.

-She Gan - Clears Heat, relieves Fire toxicity, transforms Phlegm and clears the Lungs. With Huang Qin, for a sore throat and coughing due to Lung Heat. With Huang Qin and Jie Geng, for pain and swelling of the throat with hoarseness due to Fire Excess. With Xing Ren and Jie Geng, for coughing, pain and swelling of the throat with difficulty expectorating due to Lung Heat.

-Jie Geng - Opens the Lungs, spreads Lung Qi and expels Phlegm. With Ban Xia, for coughing due to Wind-Cold Invasion or long-standing Phlegm-Dampness.

-Xing Ren - Stops cough, calms wheezing, moistens the Intestines and unblocks bowels.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi harmonizes the Stomach and stops vomiting. With Chen Pi, for epigastric and abdominal distention or pain due to disharmony of the Stomach Qi and a productive cough and a stifling sensation in the chest due to Phlegm-Damp Obstruction or Spleen Qi Deficiency. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao.
With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention and anorexia due to congested fluids.

-Chen Pi - Regulates and descends Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Fu Ling and Ban Xia, for coughing due to accumulation of Dampness and Phlegm.

-Huang Qin - Clears Heat, cools the Blood, dries Dampness, drains Fire, detoxifies and calms ascending Liver Yang. With Bai Shao, for dysenteric disorders with abdominal pain due to Heat entering the Interior.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind and alleviates pain.

-Hua Shi - Expels Damp-Heat, releases Summeheat and resolves Dampness.

-Jiang Can - Dispels Wind, disperses Wind-Heat, stops itching and pain, transforms Phlegm, softens hardness, eliminates toxins and dissipates nodules.

TREATS - Gu syndrome.

* SAN ZI YANG QIN TANG - 三子養親湯 - Three Seed Decoction to Nourish One's Parents. Decoction of Three Seeds Nourishing the Parents. San Zi Yang Qin Tang Three-Seed Decoction to Nourish One's Parents

ACTIONS - Descends Qi. Relaxes the diaphragm. Reduces Food Stagnation. Resolves Phlegm

SYNDROMES - Cold in the Lungs with Food Stagnation. Cold Phlegm Obstructs the Lungs. Phlegm Retention with Qi Stagnation. Han Tan. Elderly person with a weak Spleen and Stomach and Phlegm due to Food Stagnation. Emergency Rebellious Qi Conditions

CLINICAL MANIFESTATIONS - Cough. Wheezing. Copious sputum. Chest distention. Anorexia. Indigestion. Hiccup. Shortness of breath.

HERBS AND ACTIONS

-Bai Jie Zi - Warms the Lungs, regulates Lung Qi, resolves Phlegm and relaxes the diaphragm. With Lai Fu Zi restores the smooth flow of Qi and reduces Phlegm to treat coughs and wheezing especially when the chest and diaphragm feel full of Phlegm, particularly Cold-Phlegm, and the descent of Lung Qi is impaired. With Lai Fu Zi and Zi Su Zi for cough with copious, clear, bubbly sputum, and pain, fullness, and distention of the chest due to Cold-Phlegm Obstructs the chest and flanks.

-Zi Su Zi - Stops cough, calms wheezing, descends Qi and dissolves Phlegm.

-Lai Fu Zi - Reduces Food Stagnation, transforms accumulation, eliminates distention, descends Qi and reduces Phlegm.

TREATS

Chronic bronchitis. Bronchial asthma. Obesity. Hiccup. Chronic obstructive pulmonary disease (COPD). Nausea/Vomiting. Globus hystericus. Indigestion. Bronchiectasis. Emphysema. Pediatric asthma. Diaphragm spasms. Vascular Bi. Cough. Cor

pulmonare. Anorexia. Upper respiratory tract infection. Dyspnea.

* SHENQI COMPOUND

Shenqi Compound improves lower extremity atherosclerosis of patients with type 2 diabetes by affecting blood glucose fluctuation. Shenqi compound can reduce blood glucose fluctuation and low-grade inflammation, and protect blood vessels.

SQ has the potential to alter the composition of intestinal microbiota, particularly in relation to intestinal inflammation, thereby contributing to the improvement of the hyperglycemic profile in T2DM. SQ, has significant impact in reducing blood glucose levels, mitigating inflammatory cytokines, enhancing lipid profiles, and alleviating insulin resistance. Moreover, SQ positively influences the diabetes model animals by regulating the diversity of intestinal microbiota and augmenting various metabolic pathways.

Herbs - Ren Shen, Huang Qi, Sheng Di Huang, Shan Yao, Shan Zhu Yu, Tian Hua Fen, Dan Shen, Da Huang

* WANG YI JIAN - 网易煎 - Retinal Changes Decoction

ACTIONS - Enriches the Kidneys. Tonifies Yang. Nourishes the Blood. Tonifies Qi. Invigorates the Blood. Unblocks the channels

SYNDROMES - Qi, Blood, Yin and Yang Deficiency

CLINICAL MANIFESTATIONS - Decreased visual acuity which is worse at night and when fatigued. A pale and possibly sallow, yellow complexion. Fatigue. Lack of strength. Shortness of breath on slight exertion. Dry skin. Brittle nails. Low back and knee weakness and pain. Tinnitus. Dizziness. Impaired memory. Decreased hearing. Decreased libido. Cold hands and feet. Chilliness of the upper back. Aversion to Cold. Nocturia. Maybe seminal emission. Constipation. Spider Naevi. Cherry hemangiomas or other varicosities. Age spots.

HERBS AND ACTIONS

-Ji Xue Teng - Invigorates and tonifies the Blood, activates the channels and relaxes the sinews.

-Dang Shen - Tonifies the Middle Jiao, augments Qi, nourishes the Blood and promotes the generation of Body Fluids. With Dang Gui and Shu Di Huang, for Qi and Blood Deficiency with dizziness, weakness and lassitude.

-Shu Di Huang - Nourishes the Blood and nourishes Liver and Kidney Yin.

-Tu Si Zi - Tonifies the Kidneys and Liver, improves vision, strengthens Yang, nourishes Yin, astringes Jing and urine and benefits the marrow.

-Lu Lu Tong - Promotes the movement of Qi, invigorates the Blood, opens the Middle Jiao and unblocks the channels.

-Mi Meng Hua - Clears the Liver, brightens eyes and reduces superficial visual obstruction. With Gou Qi Zi and Tu Si Zi, for blurred or otherwise impaired vision due to Liver and Kidney Deficiency.

-Nu Zhen Zi - Nourishes and tonifies Liver and Kidney Yin and clears Deficiency Heat. With Shu Di Huang and Gou Qi Zi, for diminished visual acuity due to Liver and Kidney Yin Deficiency.

-Gou Qi Zi - Nourishes and tonifies Liver and Kidney Blood and Yin, benefits Jing and brightens the eyes. With Shu Di Huang, for Liver and Kidney Deficiency.

-Fu Zi - Warms Ming Men Fire and assists Heart, Kidney and Spleen Yang.

-Ba Ji Tian - Tonifies the Kidneys and strengthens Yang.

-Chong Wei Zi - Invigorates the Blood, clears Heat and clears the eyes.

-Dang Gui - Tonifies, invigorates and harmonizes the Blood. With Tao Ren and Hong Hua, for Blood Stasis. With Bai Shao, regulates and harmonizes Qi and Blood. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood.

-Bai Shao - Nourishes the Blood, astringes Yin, adjusts the Ying and Wei, calms Liver Yang and Liver Wind and alleviates pain. With Shu Di Huang and Dang Gui, for dizziness, blurred vision and dysmenorrhea due to Blood Deficiency or Stasis.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Hong Hua, invigorates the Blood for all types of Blood Stagnation.

-Hong Hua - Invigorates the Blood, dispels Blood Stasis, opens the channels and alleviates pain.

-Sheng Ma - Raises Yang and lifts sunken Qi. With Chai Hu, for prolapse due to Yang Deficiency. With Dang Gui and Tao Ren, raises the clear Qi, allowing turbidity to descend and moistening the Intestines.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS - Macular degeneration.

* XUAN BI TANG - 宣痺湯 - Disband Painful Obstruction Decoction. Decoction to Relieve Bi Syndrome. Decoction for Removing the Meridian Obstruction

ACTIONS - Clears and Resolves Damp-Heat. Unblocks the channels. Disbands painful obstruction

SYNDROMES - Damp-Heat Bi. Wei Syndrome due to Damp-Heat Accumulation (modified)

CLINICAL MANIFESTATIONS - Heat and pain in the joints. Reduced mobility. Fever and shaking chills or. Fever with sweating. Lusterless yellow complexion. Scanty, dark urine. Pain worse on cloudy or rainy days. Arthralgia involving one or several joints. Local redness and Heat of the extremities. Swelling with excruciating pain. Severe limitation of movement. Oliguria. Pain worse better the day and worse at night. Thirst. Dryness of the mouth. Irritability. Restlessness. Desire for cold drinks. Aversion to Heat.

HERBS AND ACTIONS

-Guang Fang Ji - Expels Wind-Dampness, dispels Damp-Heat in the Upper Jiao, disperses superficial swelling, promotes urination, dries Dampness, stops pain and strengthens the Spleen (affects all three Jiaos). With Yi Yi Ren, for Damp-Heat-induced extremity pain.

-Xing Ren - Regulates the Lung's water metabolism function.

-Yi Yi Ren - Promotes urination, strengthens the Spleen, clears Heat, expels Wind-Dampness, soothes numbness and clears Damp-Heat. With Can Sha, strengthens the Spleen, resolves Dampness and treats painful obstruction.

-Can Sha - Dispels Wind Dampness, harmonizes the Stomach and transforms turbid Dampness. With Han Fang Ji, Yi Yi Ren and Lian Qiao, for Damp-Heat Bi and Wind-Damp Bi.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi, and reduces swelling. With Can Sha, dries Dampness and eliminates turbidity.

-Lian Qiao - Clears relatively superficial Heat and promotes urination.

-Zhi Zi - Clears Heat, eliminates irritability, drains Damp-Heat and reduces swelling. With Hua Shi, Lian Qiao and Chi Xiao Dou, assists in clearing Heat and draining Dampness through the urine.

-Hua Shi - Promotes urination and expels Damp-Heat.

-Chi Xiao Dou - Promotes urination, clears Heat, clears Damp Heat and reduces

swelling.

TREATS

Rheumatic fever. Rheumatic arthritis. Rheumatoid arthritis. Rheumatic Heart disease. Gouty arthritis. Connective tissue disorders. Mononeuropathy. Myasthenia gravis. Perspiration. Temporomandibular joint syndrome (TMJ). Arthralgia. Subacute lupus erythematosus. Guillain-Barre syndrome. Fever. Erythema arthriticum. Polyneuropathy. Neuralgic aneuropathy. Low back pain. Osteoarthritis. Painful obstruction.

* YU ZHEN SAN - 玉真散 - True Jade Powder. Powder for Tetanus

ACTIONS - Dispels Wind. Transforms Phlegm. Relieves muscular tetany. Stops convulsions. Alleviates pain

SYNDROMES - Toxic Wind-Heat due to incised wounds. Wind-Phlegm (Feng Tan)

CLINICAL MANIFESTATIONS - Stiffness and spasms of the jaw. Stiff and tense neck and jaw. Spasms of the extremities. Mouth closed. Lip spasms. Dizziness. Insomnia. Vomiting. Deviation of the eyes. Rigidity of the entire body. Opisthotonis. Trismus.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - * Bai Fu Zi and Tian Nan Xing are very toxic and should be used with extreme caution. Contraindicated during pregnancy. Contraindicated for those with Body Fluid or Yin Deficiency. Do not take long-term. Do not use for advanced-stage muscular tetany. If severe hemorrhaging occurs due to trauma, modify with Blood nourishing and sinew relaxing herbs.

HERBS AND ACTIONS

-Bai Fu Zi - Dries Dampness, transforms Phlegm, expels Wind and stops spasms. With Tian Nan Xing, Fang Feng and Tian Ma, for tetanus, muscle spasms and stiffness of the neck and opisthotonis with clenched jaws.

-Tian Nan Xing - Disperses Wind-Phlegm in the channels, stops spasms and alleviates pain. With Fang Feng, Bai Zhi and Tian Ma, for muscular tetany with lockjaw and opisthotonis.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction and alleviates pain. With Fang Feng, for Wind-Dampness.

-Bai Zhi - Expels Wind, eliminates Dampness, dispels Cold and alleviates pain.

-Fang Feng - Expels Internal Wind, stops spasms and alleviates pain. With Tian Nan Xing, for headache, generalized body aches and numbness due to Wind-Phlegm Obstructing the channels. With Tian Nan Xing, Tian Ma and Bai Fu Zi, for opisthotonis,

trismus, spasms and convulsions due to Liver Wind.

-Tian Ma - Extinguishes Wind, calms the Liver, stops spasms and tremors, subdues Rising Liver Yang and alleviates pain. With Tian Nan Xing and Bai Fu Zi, for tetany and opisthotonis.

TREATS

Neurotoxic clostridial diseases. Tetanus. Botulism. Post-traumatic pain. Trismus. Insomnia. Rabies. Kyphosis. Facial paralysis. Chorea. External ulcerations. Dizziness. Vomiting. Neck stiffness.

* ZHI SHI XIAO PI WAN - 枳实消痞囊 - Unripe Bitter Orange to Reduce Distention

ACTIONS - Moves Qi. Reduces focal distention. Eliminates fullness. Strengthens the Spleen. Harmonizes the Stomach

SYNDROMES - Spleen Qi Deficiency with Liver Qi Stagnation with Cold and Heat

CLINICAL MANIFESTATIONS - Distention and fullness in the upper epigastrium. Lack of thirst. Lack of appetite. Fatigue. Weakness. Maybe focal distention in the chest and abdomen. A wan complexion. Lethargy. Poor digestion. Irregular bowel movements (sometimes loose, sometimes hard)

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Use with caution for those with severe Qi Deficiency.

HERBS AND ACTIONS

-Zhi Shi - Breaks up Stagnant Qi, reduces accumulation, descends Qi, unblocks the bowels, removes Stagnant Food, transforms Phlegm, reduces distention and resolves hardenings. With Hou Po, for distention, swelling and pain due to Food Stagnation and Qi Stagnation. With Hou Po, Huang Lian, Bai Zhu and Ban Xia, for distention and fullness in the upper epigastrium, lack of appetite, fatigue and weakness from a Cold-Heat complex secondary to Spleen and Stomach Deficiency. With Bai Zhu, for distention in the epigastrium and abdomen due to Spleen and Stomach Deficiency with Food Stagnation.

-Hou Po - Promotes the movement of Qi in the Middle Jiao, resolves Stagnation, descends Qi, dries Dampness and transforms Phlegm. With Zhi Shi, for abdominal or chest distention, focal epigastric distention, wheezing, shortness of breath, nausea, rebellious Qi or constipation from Cold, Heat, Dampness or Phlegm as long as clumped Qi is at the root of the problem. With Gan Jiang, for acute diarrhea from Cold attacking the Middle. With Huang Lian, for acute diarrhea associated with sudden turmoil disorder from Damp-Heat.

-Huang Lian - Clears Heat, drains Dampness and drains Stomach Fire. With Ban Xia and Gan Jiang, for Cold and Heat complexes in the Intestines and Stomach marked by focal distention, nausea, vomiting and feelings of oppression in the chest.

-Ban Xia - Dries Dampness, transforms Phlegm, descends Rebellious Qi and stops vomiting. With Huang Lian, for epigastric distention and indigestion due to a simultaneous invasion of Hot and Cold pathogenic influences into the Stomach. With Hou Po, for Phlegm-Dampness with Qi Stagnation to open Phlegm and Qi Obstruction with a sensation of fullness in the chest with coughing and wheezing, nausea, vomiting and a sensation of distention in the hypochondrium.

-Ren Shen - Tonifies Spleen, Stomach and Lung Qi. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Bai Zhu - Tonifies the Spleen, augments Qi, dries Dampness and promotes water metabolism. With Dang Shen and Gan Jiang, for Deficiency Cold of the Middle Jiao with abdominal pain, distention, vomiting and diarrhea. With Zhi Shi, for Spleen Deficiency with Qi Stagnation with anorexia, epigastric focal distention and fullness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency. With Zhi Shi, Ren Shen, Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency with Qi and Food Stagnation. With Gan Jiang, Ren Shen and Gan Cao, for Spleen and Stomach Deficiency Cold.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ren Shen and Bai Zhu, for a weak and deficient Spleen with fatigue, anorexia and loose stools. With Ban Xia, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools.

-Mai Ya - Reduces Food Stagnation, improves digestion, strengthens the Stomach and facilitates the smooth flow of Liver Qi. With Gan Jiang, for indigestion due to Spleen and Stomach Deficiencies.

-Gan Jiang - Warms the Middle and expels Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Bai Zhu and Ren Shen, for Spleen Yang Deficiency with a cold abdomen, vomiting and diarrhea. With Ban Xia, for vomiting of saliva or dry heaves due to Cold-induced congested fluids. With Gan Cao, for epigastric pain and vomiting due to Spleen and Stomach Deficiency Cold. With Ban Xia and Ren Shen, for vomiting due to Deficiency Cold.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels.

TREATS

Anorexia. Chronic gastritis. Functional gastrointestinal disorders. Cholecystitis.

Cushing's syndrome. Fatigue. Chronic atrophic gastritis. Indigestion. Intestinal obstruction. Cholelithiasis. Weakness. Diabetic gastroparesis.

1.3.3.47 RT-TCM-47

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_47

Colon Support-TCM, FlexMLT-TCM, Gengnianchun, Heel Pain-TCM, Minor Injuries-TCM, Osteo8-Formula-TCM, Podopathy-Foot Pain-TCM, Rosy Tincture, Zheng Gu Shui

Recordings Updated in June 2025

* COLON SUPPORT-TCM

Supports colon function with gentle relief. https://kamwostore.com/

Herbs - Zhi Shi (bitter Orange Young Fruit), Fan Xie Ye (Senna Leaf), He Shou Wu (Fo-Ti Dried Root Tuber), Hei Zhi Ma (Black Sesame Seed), Da Huang (Chinese Rhubarb Root), Dang Gui Wei (Dong Quai Root Tail), Shu Di Huang (Rehmannia Root Tuber prepared)

* FLEXMLT-TCM

Flex is explicitly designed to treat chronic or mid-to-late stages of musculoskeletal injuries, with atrophy of the soft tissues (muscles, tendons, ligaments, and cartilage), decreased mobility of the joints, cartilage degeneration, and generalized weakness and pain.
Invigorates blood circulation in the extremities to treat chronic or mid-to-late stages of musculoskeletal injuries soft tissue injuries, help protecting the joints/cartilage against wear and tear from repetitive movements supports the recovery of soft tissues and benefits the joints chondroprotective (delays joint space narrowing), and osteogenic (promotes bone formation), neuroregenerative (stimulates growth/repair of nerve tissues), analgesic (pain-relieving), and anti-inflammatory properties.

HERBS

-Dang Shen (Radix Codonopsis) - qi tonic (SP/LU) that also nourishes the blood
-Dang Gui (Radix Angelicae Sinensis),
-Shu Di Huang (Radix Rehmanniae),
-Bai Shao (Radix Paeoniae Alba) - all blood tonics with the ability to nourish

yin/preserve yin, this helps to promote blood circulation and the generation of new tissue; Dang gui and bai shao are a classic pair of herbs used to tonify blood in many different conditions
-Chuan Niu Xi (Radix Cyathulae) - blood moving, goes to the Liver and Kidneys to strengthen sinews/bones and pairs with dang gui to invigorate blood which is good for traumatic pain and healing soft tissue
-Wu Jia Pi (Cortex Acanthopanacis),
-Qian Nian Jian (Rhizoma Homalomenae),
-Xu Duan (Radix Dipsaci) - the first two dispel wind-damp and xu duan is a yang tonic; All three go to the Kidneys and Liver to strengthen the sinews and bones, good for stiffness and weakness
-Chu Shi Zi (Fructus Broussonetiae),
-Zhi He Shou Wu (Radix Polygoni Multiflori Praeparata) - yin tonics that nourish the Liver and Kidneys and will strengthen muscles, tendons, cartilage, and ligaments

Cautions:
-This formula should not be used during the acute phases of injuries with bleeding and bruises, as there are many tonic or warm herbs that may worsen the condition.
-May enhance the overall effectiveness of Coumadin (Warfarin), an anticoagulant drug.

* GENGNIANCHUN

It is currently used in the clinic to alleviate declining functions related to ageing.
Herbs - Shengdi, Huanglian, Baishao, Zhimu, Roucongrong, Bajitian, Fuling, Yinyanghuo, Huangbai, Gouqizi, Tusizi, Guiban

* HEEL PAIN-TCM

Common Chinese medicine herbs used for heel pain.

Function: Increase blood circulation and relieve pain.

Herbs - Tou Gu Cao (Caulis Impatientis), Ru Xiang (Frankincense), Chuan Niu Xi (Cyathula Root), Wei Ling Xian (Radix Clematidis), Mo Yao (Myrrh).

* MINOR INJURIES-TCM

A formula for the treatment of minor injuries like sprains and avulsions. Other inflammatory conditions like chronic musculo-tendinous pain and or fasciitis. anti-oxidant, anti-inflammatory and pro-angiogenic
Herbs - Hong Hua, Xuduan, Da Huang, Dang Gui, Niu Xi

* OSTEO8 FORMULA-TCM

Replenishes Kidney jing (essence) for patients with symptoms of osteoporosis and bone fractures. Spleen Qi Deficiency with Lower Jiao Dampness. Strengthening the bones, replenishing Kidney jing, move qi, activate blood, reduce swelling, alleviate pain, benefit bone, strengthen Spleen, bone fracture recovery, protection against long-term degenerative conditions like osteoporosis; encourage blood vessel formation, help with wound healing and tissue regeneration.

HERBS

-Lu Jiao (Cornu Cervi) - yang tonic, replenishes Kidney jing (essence), nourishes blood and strengthens sinews and bones
-Gu Sui Bu (Rhizoma Drynariae), Xu Duan (Radix Dipsaci) - yang tonics, these are a good pair of herbs for bone fractures or bad sprains to promote mending of bones and to relieve soreness, weakness, and pain
-Gui Ban (Plastrum Testudinis), Gou Qi Zi (Fructus Lycii), E Jiao (Colla Corii Asini) - yin and blood tonics, all go to the Liver and Kidneys to nourish essence and support bone and tissue healing
-Dang Gui (Radix Angelicae Sinensis), Ren Shen (Radix et Rhizoma Ginseng) - blood and qi tonics respectively, added to provide overall strengthening for the body during recovery

* PODOPATHY-FOOT PAIN-TCM

The traditional Chinese medicine composition has effects of clearing away heat and toxic materials, removing stasis, dredging collaterals, relaxing muscles, stimulating blood circulation, diminishing inflammation and relieving pain, is a pure traditional Chinese medicine preparation, is safe and reliable, is free of toxic and side effects. Podopathy such as dry feet, chapping feet and beriberi, and also realizes a good treatment effect for constipation.

Herbs - Pu Gong Ying, Xiao Ji, Che Qian Zi, Zi Hua Di Ding

* ROSY TINCTURE

Rosacea is considered to be chi and heat stagnation, and Blood stagnation in the Lung and Stomach channel — which open onto the nose, the sides of the nose, and the cheeks. ROSY contains a carefully chosen combination of herbs and flowers designed to cool and nourish the blood, increase microcirculation, strengthen capillaries, and help drain the heat from the Lung and Stomach channels.

Herbs - Sheng Di Huang, Dang Gui, Huang Qin, Hong Hua, Chuang Xiong, Zhi Mu, Pu Gong Ying, Chi Shao

Shi Gao, Mu Dan Pi, Zhi Zi, Jie Geng, Gan Cao

* ZHENG GU SHUI Bone Setting Water

Zheng Gu Shui is a popular liniment for pain relief and injury recovery in traditional Chinese medicine. Bone Setting Water's blend of herbs, combined with its analgesic and anti-inflammatory properties, make it a versatile remedy for various musculoskeletal conditions.

Uses - Pain Relief. Improved Circulation. Injury Recovery. Musculoskeletal anti-inflammatory.

HERBS

-Zhang Nao (Camphor): Relieves pain, antifungal, anti-itch, anti parasitic, and improves circulation.
-Bo He Nao (Menthol): Relieves pain, cooling, opens pores, and allows other herbs to permeate the skin.
-Hu Zhang (Knotweed rhizome): Relieves pain and promotes circulation, anti-inflammatory, antibacterial, and antiplatelet (unblocks circulation where anticoagulants are ineffective.)
-E Zhu (Curcumae rhizome): Promotes circulation, relieves pain, and antibacterial.
-Rou Gui (Saigon cinnamon bark): Promotes circulation, encourages generation of qi and blood, antiplatelet, antibacterial, warming, and relaxes muscles.
-Bai Zhi (Angelica root): Relieves pain, antibacterial and antifungal, and relaxes muscles.
-Hua Jiao (Chinese prickly ash): Warming, relieves and numbs pain, antiparasitic and antibacterial, and promotes circulation.
-Xu Chang Qing (Paniculate swallow-wort root): Relieves joint pain, pain due to trauma, heals rashes, sores, and relieves skin itching including eczema and snakebite.
-Qian Jin Ba (Moghania root): Strengthens sinew and bone, decreases inflammation, and relieves arthritis and bone pain.
-San Qi (Notoginseng root): Stops bleeding, relieves pain, and reduces swelling, bruising, and inflammation.
-Shan Jin Che (Arnica flower): Anti-inflammatory, relieves bruising, muscle soreness, and aching joints.
-Yan Hu Suo (Corydalis): Anti-inflammatory, promotes circulation, calms overactive and painful nerves.

1.3.3.48 RT-TCM-48

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_48

Bao He Wan, Cerebral Infarction-TCM, Clear Tincture, Gui Ling Gan Lu Yin, Nutritional Flavonoids-TCM, Sinus Relief-TCM. Spirulina Mix-TCM, Xinkeshu Tablets, Ya-Ba Meth Withdrawal-TCM Herbs-Molecules

Recordings Updated in June 2025

* BAO HE WAN - 保和丸 - Preserve Harmony Pill. Citrus and Crataegus Formula. Pills for Indigestion. Po Chai Pills

ACTIONS - Disperses Food. Harmonizes the Stomach

SYNDROMES - Food Stagnation in the Stomach

CLINICAL MANIFESTATIONS - Distention and fullness in the chest and epigastrium. Abdominal distention with occasional pain. Rotten smelling belching. Acid regurgitation. Nausea and vomiting. Aversion to food. Maybe diarrhea. Dysentery. Maybe constipation. Anorexia. Bad breath. Intermittent fever.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - Contraindicated for those with Spleen Deficiency. Use with caution during pregnancy.

NOTES - With modifications, this formula relieves chemotherapy-induced nausea and vomiting in cancer patients.

HERBS AND ACTIONS

-Shan Zha - Reduces all types of Food Stagnation especially meat and fatty foods. With Shen Qu, for general indigestion and Food Stagnation. With Lai Fu Zi and Shen Qu, reduces stagnation and accumulation caused by overindulgence in food and drink of all types. With Mai Ya and Shen Qu, for abdominal distention, belching, diarrhea and anorexia due to Food Stagnation and childhood nutritional impairment due to improper breast feeding.

-Shen Qu - Reduces Food Stagnation, promotes digestion, reduces stagnant alcohol, moves Qi and harmonizes the Stomach.

-Lai Fu Zi - Descends Qi and reduces accumulation of Phlegm from stagnant grains. With Shan Zha, Shen Qu and Chen Pi, for abdominal distention, borborygmus, belching and acid regurgitation due to stagnation in ST or Intestines. With Ban Xia, for distention and vomiting due to Food Stagnation.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness, transforms Phlegm and descends Qi.

With Ban Xia, moves Qi and transforms stagnation to harmonize the Stomach and stop nausea and vomiting.

-Ban Xia - Descends Qi, transforms Phlegm, harmonizes the Stomach and reduces distention. With Chen Pi, for Stomach Qi Disharmony with epigastric and abdominal distention or pain. With Fu Ling, expels Phlegm and stops nausea and vomiting, hiccups, coughs with clear, profuse Phlegm and loose and watery stools, treats Phlegm, Thin Mucus and turbid Dampness and prevents turbid Phlegm and Dampness from disturbing the Heart with dizziness, palpitations and insomnia.

-Fu Ling - Strengthens the Spleen, drains Dampness, harmonizes the Middle Jiao and transforms Phlegm. With Ban Xia, expels Phlegm and stops nausea and vomiting. With Ban Xia and Chen Pi, for nausea, vomiting, chest fullness and distention, and anorexia due to congested fluids.

-Lian Qiao - Clears Heat due to Stagnation.

-Mai Ya - Added to reduce stagnation from grains.

TREATS

Acute gastroenteritis. Acute exacerbations of chronic gastroenteritis. Chronic hepatitis. Acute hepatitis. Acute pancreatitis. Chronic pancreatitis. Atrophic gastritis. Obesity. Insomnia. Abdominal pain. Asthma. Cough. Pertussis. Nausea/Vomiting. Gastric hyperacidity. Peptic ulcer. Celiac disease. Diarrhea. Acute or chronic cholecystitis. Indigestion. Gastralgia. Gastrointestinal influenza. Gastrolithiasis. Anorexia. Acid regurgitation. Hiccups. Stomach cancer. Bronchitis. Pneumonia. Constipation. Abdominal fullness and distention. Hematemesis. Bad breath. Temporomandibular joint syndrome (TMJ). Anorexia associated with AIDS/HIV.

* CEREBRAL INFARCTION-TCM

Cerebral Infarction is caused by blockage of blood circulation and insufficient blood oxygen supply in the brain, which will cause irreversible injury to the brain function of patients. The formula promote blood circulation and remove blood stasis, stimulate meridians and collaterals, strengthen the liver and nourish the kidneys.

Huang Qi can invigorate qi, Niu Xi can relax veins and activate blood, Di Long can regulate veins, and Chuan Xiong has the effect of activating qi and blood. The combination of TCM herbs can significantly reduce the blood viscosity of patients, inhibit platelet aggregation, and repair necrotic nerve cells, which can substantially optimize the prognosis and sequelae of cerebral infarction.

Herbs - Di Long, Dang Gui, Tu Bie Chong, Shui Zhi, Hong Hua, Niu Xi, Chi Shao, Chuan Xiong, San Qi, Ji Xue Teng, Huang Qi

* CLEAR TINCTURE

CLEAR (tincture) is designed for acne prone skin and developed for cystic acne, it can work on any hot, superficial breakouts. CLEAR is designed to calm blemishes and deep eruptions by healing skin from within. The TCM herbs in this formula are known to clear heat and disperse stagnation, since acne is considered to reflect internal heat in the Stomach, Lung, or blood levels.

Herbs - Jin Zhan Ju, Jing Jie, Lian Qiao, Fang Feng, Dang Gui, Chuang Xiong, Chi Shao, Bai Zhi, Jie Geng, Chai Hu, Chen Pi, Huang Qin, Zhi Zi, Gan Cao

* GUI LING GAN LU YIN - 桂苓甘露飲 - Cinnamon and Poria Sweet Dew Drink. Cinnamon and Poria Sweet Dew Decoction

ACTIONS - Expels Summerheat. Clears Heat. Regulates Qi. Resolves Dampness

SYNDROMES - Summerheat with Internal Stagnation of water and Dampness

CLINICAL MANIFESTATIONS - Fever. Headache. Irritability. Extreme thirst. Dysuria with reduced urine. Oliguria with reddish urine. Foul smelling vaginal discharge. Yellow urine. Dirty complexion. Severe: simultaneous vomiting and diarrhea. Abdominal fullness, pain or stifling sensation. All symptoms and signs occur during the summer.

CONTRAINDICATIONS AND HERB/DRUG INTERACTIONS - This formula treats Summerheat and Dampness with overwhelming Heat and Dampness or Heat more pronounced than Dampness. It is contraindicated for those with Dampness more pronounced than Heat.

HERBS AND ACTIONS

-Hua Shi - Promotes urination, drains Heat from the Urinary Bladder, expels Damp-Heat, releases Summeheat and resolves Dampness. With Gan Cao, for Summerheat causing painful urinary dysfunction, thirst, irritability, and fever.

-Gan Cao - Tonifies the Spleen, augments Qi, clears Heat and moderates and harmonizes the harsh properties of other herbs.

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability and quenches thirst.

-Han Shui Shi - Clears Heat, drains Fire from the Yang Ming/Qi Level and expels Summerheat. With Shi Gao, for Excess Qi Level Heat. With Shi Gao and Huan Shi, for Heat in the Yang-Ming/Qi level and Summerheat with high fever, thirst and irritability.

-Rou Gui - Leads the Fire back to its source.

-Zhu Ling - Promotes urination, leaches out Dampness and dispels Damp-Heat. With Zhu Ling, drains Damp, unblocks and drains urinary pathways and drains Heat from the Bladder.

-Fu Ling - Promotes urination and leaches out Dampness. With Ze Xie, facilitates the removal of water and leaches out Dampness to treat stagnant water and Dampness leading to edema, jaundice, diarrhea, Milky Lin, and scanty, difficult urination with abdominal distention. With Ze Xie and Zhu Ling, for dysuria. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Zhu Ling, promotes urination.

-Ze Xie - Promotes urination and leaches out Dampness. With Bai Zhu, for Spleen Deficiency leading to accumulation of Dampness with urinary difficulty, loose stools, diarrhea, Milky Lin or vaginal discharge.

-Bai Zhu - Dries Dampness and promotes water metabolism. With Zhu Ling and Ze Xie, for edema due to Internal Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency. With Fu Ling, Zhu Ling and Ze Xie, for edema with Spleen Deficiency.

TREATS

Acute gastroenteritis. Cholera. Heat stroke. Kidney stones. Urethritis. Thrush. Abdominal pain. Headache. Dysentery. Diarrhea. Infantile diarrhea. Vomiting. Allergy. Fever. Vaginal discharge.

* NUTRITIONAL FLAVONOIDS-TCM

Nutritional flavonoids with a focus on skin, hair and nails, and water.

Icariin, Corilagin, Gallic acid, Oleuropein, Caffeine, Hydroxysafflor yellow A, Linoleic acid, β-sitosterol, Bicyclo(10.1.0)tridec-1-ene, Quercitrin, L-Maackiain, Medicarpin, Shikimic acid, Procyanidin B-3, Ginsenoside Rb1, Anthraquinone, Sabinene, Isobornyl acetate, 2,3,5,4′-Tetrahydroxystilbene 2-O-β-D-glucoside, Emodin, Oregonin, Myristoleic acid, Linoleic acid, Decursin , 3-Deoxysappanchalcone, 7-Hydroxycoumarin, Protocatechuic acid, Ferulic acid, Kaempferol, Isoquercetin, 3,4,5-Tri-O-Caffeoylquinic acid, Octaphlorethol A, α-Tocopherol, Oleic acid, Costunolide, Morroniside, Timosaponin BII, Apo-9′-fucoxanthinone, Soyasaponin I, Kaikasaponin III, Myricitrin, Myricetin, Afzelin, Quercetin, Amentoflavone, Ginsenoside Ro, Physcion, 12-Methoxycarnosic acid, Avicequinone C, Dieckol, Sinapic acid, Octaphlorethol A, Fisetin, Phlorofurofucoeckol A, Eckol, Dieckol, Epigallocatechin-3-gallate, Epicatechin-3-gallate, Epigallocatechin, Epicatechin.

* SINUS RELIEF-TCM

Sinus Relief-TCM soothes sinuses and supports nasal function.

HERBS

-Bai Zhi (Fragrant Angelica Root)
-Fang Feng (Siler Root)
-Gan Cao (Chinese Licorice Root)
-Huang Qin (Chinese Skullcap Root)
-Lian Qiao (Forsythia Fruit)
-Xin Yi Hua (Magnolia Flower Bud)
-Ye Ju Hua (Wild Chrysanthemum Flower)
-Jing Jie (Schizonepeta Aerial Parts)

* SPIRULINA MIX-TCM

Spirulina Mix TCM formula balances and supports the immune system, reduces blood lipid levels, lowers blood sugar levels, helps daily colon cleanse, and menopause in women.

Herbs - Luo Xuan Zao, Kun Bu, Hou Po, Huang Qi, Che Qian Zi, Shan Yao, Rou Gui, Yi Yi Ren

* XINKESHU TABLETS

Xinkeshu tablets help maintain endothelial homeostasis in coronary artery disease patients with anxiety, depression, endothelial dysfunction, coronary artery disease, angina pectoris,

Herbs - Dan Shen, Ge Gen, San Qi, Shan Zha, Mu Xiang

* YA-BA METH WITHDRAWAL-TCM HERBS-MOLECULES

AT1R blockade has been suggested to be a therapeutic target for the cognitive deficits associated with a wide range of central nervous system disorders, including Alzheimer's disease, HIV infection, neuropathic pain, Parkinson's disease, schizophrenia, and depression.
ATR type 1 (AT1R) antagonist, candesartan cilexetil, effectively reduced METH self-administration and reinstatement, in conjunction with the counter-regulation of D2R and AT1R. Methamphetamine (METH) use disorder.

Adenosine has an inhibitory effect in the central nervous system (CNS). Caffeine's stimulatory effects are credited primarily (although not entirely) to its capacity to block adenosine receptors, thereby reducing the inhibitory tonus of adenosine in the CNS. This reduction in adenosine activity leads to increased activity of the neurotransmitters dopamine and glutamate.Dipyridamole helps treat cardiomyopathy, and potentiates the effects of adenosine

- Addiction - Candesartan cilexetil, Adenosine, Dipyridamole, Beta-sitosterol, S-Scoulerine, Isocorypalmine, Medicarpin, Hyndarin, Decylubiquinone, Nicotinamide

- Withdrawal moles - Pseudoginsenoside F11, Ginsenoside Re, Ginsenoside Rb1, Baicalein, Rhynchophylline, Hispidulin, Kolaviron, Sauchinone, Chlorogenic acid, Caftaric acid, Resveratrol, Limonene, Ginkgolide B, Silibinin, Barakol, Cinnamaldehyde

-Support - Ana-12, RO-5166017, Ibudilast, Selank

1.3.3.49 RT-TCM-49

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_49

Chai Hu Li Zhong Tang, Dahuang Baiji Spray, Danggui Buxue Tang, Kushen Injection, Phlegm-purging Decoction, San Huang Gu Ben Zhi Ke, Shenma Yizhi Decoction, Shenzhi Jiannao Formula, Throat Stuck Fish Bone-TCM

Recordings Updated in June 2025

* CHAI HU LI ZHONG TANG

Chai Hu Li Zhong Tang (CHLZT) significantly reduces serum levels of total cholesterol and triglyceride, also significantly reduces the numbers of lipid droplets in the liver tissues. CHLZT improves the non-alcoholic fatty liver disease condition by regulating the hepatic lipid metabolism.

Herbs - Chai Hu, Huang Qin, Ban Xia, Dang Shen, Baizhu, Fu Ling, Sheng Jiang, Gancao, Gan Jiang, Da Zao

* DAHUANG BAIJI SPRAY

Dahuang Baiji Spray is Dahuang and Baiji. Used for radioactive skin damage, regulates

ALOX5 and inhibits inflammation.

Herbs - Bai Ji, Da Huang

* DANGGUI BUXUE TANG

Danggui Buxue Tang (DBT) has good therapeutic effects on radiation-induced myocardial damage.

Herbs - Huang Qi, Dang Gui

* KUSHEN INJECTION

Kushen Injection is a complex mixture of compounds extracted from two medicinal plants and has been used in Chinese hospitals to treat cancer for over twenty years. Kushen Injection is Kushen and Baituling. It has remarkable therapeutic effects.

Kushen Injection has been approved by the State Food and Drug Administration (SFDA) of China for clinical use since 1995 (State medical license no. Z14021231) and it has been clinically used to treat a variety of cancers including lung cancer, liver cancer, breast cancer, pancreas cancer, esophageal cancer, ovarian cancer and colorectal cancer.

Kushen injection as a supportive treatment for colorectal cancer, has been found to relieve pain, bleeding and other inflammatory reactions during radiotherapy thus reducing the severity of radiation-induced gastrointestinal mucositis.

* PHLEGM-PURGING DECOCTION

Phlegm-purging decoction, a classic Chinese herbal compound for dementia, could effectively reduce hippocampal neuron damage by reducing glutamate concentration and NMDAR expression.

Herbs - Tian Nan Xing, Ban Xia, Chen Pi, Shi Chang Pu, Zhu Ru, Zhi Shi, Ren Shen, Fu Ling, Sheng Jiang, Gan Cao

* SAN HUANG GU BEN ZHI KE

The Chinese herbal formula San Huang Gu Ben Zhi Ke has shown good clinical efficacy in COPD in preclinical studies. Animal experiments have shown that it has mucosal immune barrier function and can maintain airway wall integrity, reduce inflammatory cell infiltration, promote inflammatory damage repair, and relieve narrow airway conditions.

It is hypothesized that SHGBZK will have beneficial effects in reducing the frequency and duration of acute exacerbations, improving the exercise capacity function of patients with stable COPD diagnosed with a deficiencies in lung qi and spleen qi.

Herbs - Huang Qi, Huang Jing, Chen Pi, Bai Bu, Wu Wei Zi, Chi Shao, Huang Qin

* SHENMA YIZHI DECOCTION / 参麻益智汤

SMYZD is a compound formula with functions of supplementing qi, activating blood circulation, calming the liver and suppressing liver yang. Preclinical studies support that SMYZD could intervene in complicated molecular pathways underlying the pathogenesis of Vascular dementia and as mitochondrial targeted therapy for neurodegenerative diseases.

Herbs - Tian Ma, Gui Jian Yu, Ren Shen, Chuan Xiong

* SHENZHI JIANNAO FORMULA /参知健脑方

Shenzhi Jiannao Formula could reduce the level of APP, Aβ1-42 and 8-OHdG, so as to protect mitochondrial function and improve learning and memory ability.

Herbs - Zhi Mu, Chi Shao, Ren Shen

* THROAT STUCK FISH BONE-TCM

A simple remedy to dislodge fish bones stuck in the throat.

Herbs - Wei Ling Xian, Cao Guo, Sha Ren

1.3.3.50 RT-TCM-50

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_50

Anti-Diabetic Foot Ulcer Formula, Liver Detox Formula, Niu Huang Jie Du Pian, Plum Flower-Tian Ma Teapills, Shen Ying Yang Zheng Dan, SHL Oral Liquid, Sinew Herbal Ice, Smart Soup Herbal Formula, ZD-I Formula

Recordings Updated in June 2025

* ANTI-DIABETIC FOOT ULCER FORMULA

The anti-diabetic foot ulcer formula contains ingredients active in modifying tissue glucose homeostasis in vitro but these biological activities could not be associated with improved glycaemic control of diabetes in vivo.

Herbs - Huang Qi, Sheng Di Huang, Ba Qia, Bai Zhu, He Shou Wu, and Fang Ji

* LIVER DETOX FORMULA (Dr. Jake Fratkin's Herbal Formula)

TCM Application: Soothes liver qi, moves liver blood, tonifies liver blood, nourishes liver yin, clears liver heat.

Liver Detox Formula promotes Phase 1 and Phase 2 liver detoxification of environmental toxins and heavy metals by normalizing TCM functions of the liver. Environmental toxins are ubiquitous in the food, air and water, and include plastics, phthalates, solvents, pesticides, and herbicides.

The formula is also an excellent regulator of liver function according to TCM, and can be used for gynecological disorders due to liver dysregulation, and liver enzyme elevation due to infection.

Herbs - Dang Gui, Bai Zhu, Huang Qin, Bai Shao, Xiang Fu, Yu Jin, Wu Wei Zi, Gou Qi Zi, Mai Dong

* NIU HUANG JIE DU PIAN - 牛黃解毒片 - Cattle Gallstone Pill for Detoxification. Antiphlogistic Pills with Calculus Bovis

ACTIONS - Purges Fire. Detoxifies. Draws out pus

SYNDROMES - Intense Heat or Fire in the Liver and Stomach

CLINICAL MANIFESTATIONS - Headache. Dizziness. Red eyes. Tinnitus. Oral ulcers. Bleeding gums. Constipation.

HERBS AND ACTIONS

-Niu Huang - Drains Heat, clears the Live and resolves Fire toxicity.

-Xiong Huang - Dries Dampness, expels Phlegm and relieves toxicity.

-Bing Pian - Clears Heat, drains Fire, resolves toxicity, alleviates pain and dissipates nodules.

-Da Huang - Clears Heat, purges accumulations and reduces Fire toxicity.

-Shi Gao - Clears Blazing Stomach Fire, heals eczema, burns and ulcerated sores and wounds.

-Huang Qin - Drains Fire and detoxifies.

-Jie Geng - Expels pus. With Gan Cao, for Lung abscess with expectoration of pus and pain in the chest and flanks. With Gan Cao and Huang Qin, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat.

-Gan Cao - Clears Heat, relieves Fire toxicity and moderates and harmonizes the properties of other herbs.

TREATS - Tonsillitis. Periodontitis. Pharyngitis. Oral ulcers. AIDS/HIV. Acute leukemia. Comedones (blackheads). Boils. Furuncles. Constipation. Conjunctivitis. Tinnitus. Toothache. Red eyes.

* PLUM FLOWER-TIAN MA TEAPILLS, Gastrodia Teapills

Plum Flower Tian Ma Teapills is a Chinese Herbal Medicine which addresses chronic deficiency patterns (of Liver & Kidney yin) that result in Liver yang rising.

This formula is specifically recommended for those with chronic/recurring headaches (pounding, tension, and migraine headaches to give a few examples) and dizziness & vertigo that are rooted in Liver and Kidney yin deficiencies. Other secondary symptoms that point to the appropriate use of this formula include: insomnia, irritability, fatigue, and a red, flushed face w/ the sensation of heat rushing to the head.

This formula also extinguishes wind and can be used concurrently when headaches and dizziness are accompanied by aching, painful, stiff joints where the symptoms get worse in cold and damp weather (wind-damp bi syndrome). Contraindicated during pregnancy.

-Shu Di Huang - Prepared Rehmannia - Radix Rehmanniae Preparata
-Dang Gui - Angelica Root - Radicis Angelicae Sinensis
-Qiang Huo - Notopterygium - Rhizoma et Radix Notopterygii
-Du Zhong - Eucommia Bark - Cortex Eucommiae
-Tian Ma - Gastrodia - Rhizoma Gastrodiae
-Xuan Shen - Scrophularia - Radix Scrophulariae
-Huai Niu Xi - Achyranthes Root - Radix Achyranthis Bidentatae
-Bi Xie - Tokoro - Rhizoma Dioscoreae Hypoglaucae

-Du Huo - Pubescent Angelica Root - Radix Angelicae Pubescentis
-Fu Zi - Aconite (prepared) - Radix Aconiti Lateralis Praeparata

* SHEN YING YANG ZHENG DAN, Nourishing Bolus

FORMULA ACTIONS - Enriches the Blood. Moistens Dryness. Expels Wind. Regulates Blood flow

SYNDROMES - Blood Deficiency due to Wind-Dryness

CLINICAL MANIFESTATIONS - Headache. Dizziness. Vertigo. Tinnitus. Blurred vision. Sensation of Heat rushing to the head. Insomnia. Dream disturbed sleep. Numbness. Twitching and spasms in the extremities. Trembling tongue. Light-headedness. Pallor. Broken skin. Dry skin. Sometimes bleeding and pain. Worse in Cold weather. Better during the summer.

HERBS AND ACTIONS

-Dang Gui - Tonifies, invigorates and harmonizes the Blood and disperses Cold. With Shu Di Huang, for Heat symptoms due to Yin Deficiency and Devastated Blood. With Chuan Xiong, harmonizes, nourishes and invigorates the Blood and disperses Blood Stasis.

-Chuan Xiong - Invigorates the Blood, promotes the movement of Qi and expels Wind.

-Bai Shao -Nourishes the Blood, astringes Yin and calms Liver Yang and Liver Wind. With Dang Gui, nourishes Yin and Blood. With Dang Gui and Shu Di Huang, for dizziness, blurred vision, and dysmenorrhea due to Blood Deficiency or Stasis.

-Shu Di Huang - Nourishes Jing and Blood and nourishes Liver and Kidney Yin. With Dang Gui, for Blood Deficiency marked by dizziness, palpitations, insomnia and menstrual dysfunction. With Dang Gui, Bai Shao and Chuan Xiong, for anemia.

-Tian Ma - Extinguishes Wind and calms the Liver. With Chuan Xiong, for overwhelming attacks of Wind leading to migraines and dizziness so severe that the person feels as if they are about to fall over.

-Qiang Huo - Releases the Exterior, disperses Cold and guides Qi to the Tai Yang and Du channels.

-Tu Si Zi - Strengthens Yang, nourishes Yin, astringes Jing and tonifies the Kidneys and Liver.

-Mu Gua - Relaxes the sinews, increases Qi and Blood circulation and unblocks the channels. With Dang Gui and Bai Shao, for Blood Deficiency causing muscle spasms.

TREATS - Alopecia. Dry skin. Seborrheic baldness. Dandruff.

* SHL ORAL LIQUID

SHL oral liquid is a patented drug, and as evident from the name SHL, it consists of three main herbal ingredients: shuang, which stands for shuanghua (双花) or jinyin hua (金银花), otherwise known as honeysuckle (including several species of the genus lonicera); huang, which refers to huangqin (黄芩), a.k.a. Chinese skullcap (Scutellaria baicalensis); and lian, which is short for lianqiao (连翘), and is commonly called golden bell (Forsythia suspensa). According to TCM theory, the particular formula can expel pathological wind, relieve exterior symptoms, cleanse one of excess heat, and detoxify.

* SINEW HERBAL ICE

Plica syndrome, also called synovial plica syndrome, is a condition involving anterior knee pain. It is due to chronic or acute irritation and inflammation of the plica and synovial tissue around the plica. Under most circumstances, plica are normal non-painful structures.

Stasis is what causes swelling, inflammation, hematoma, and the discoloration of bruises. Stasis can prevent your body from healing fully and slows down the healing process. The herbal properties work to eliminate this so the body can reabsorb the fluids and increase the flow of blood so that pain relief and healing can take place. The increased circulation aids in this process and brings vital oxygen and nutrients to the injured area so it can repair and heal.

Sinew Herbal Ice contains Chinese herbs that kill pain, but painkilling herbs are not mere analgesics that mask pain. The herbs used work to break up stasis, or stagnant blood and fluids, and increase circulation to the injured area. Stasis is what causes swelling, inflammation, hematoma, and the discoloration of bruises. Stasis can prevent your body from healing fully and slows down the healing process. The herbal properties work to eliminate this so the body can reabsorb the fluids and increase the flow of blood so that pain relief and healing can take place. The increased circulation aids in this process and brings vital oxygen and nutrients to the injured area so it can repair and heal.

* anterior or anteromedial knee pain (in front and towards the midline of the patella)
* clicking may be present when bending the knee
* a high-pitched snapping may be present when bending the knee
* the knee may give away during activity
* the knee may lockup or catch during activity
* symptoms are usually aggravated by activities that require the knee to bend
* the medial or inferior aspect of the patella is usually tender

* swelling may occur, especially after prolonged physical activity

Herbs - Hong Hua (Safflower), Pu Gong Ying (Dandelion), Zhi Zi (Gardenia), Huang Bai (Phellodendron), Da Huang (Rhubarb), Huang Qin (Scutellaria Root)

* SMART SOUP HERBAL FORMULA

Smart Soup herbal formula, has been applied for many centuries, and is still prescribed by Chinese medical physicians to patients with aging-related cognitive impairment.

SS, a three-herb formula officially documented in Gu Jin Yi Jian, a book published in 1576, is composed of Rhizoma Acori Tatarinowii (AT), Poria cum Radix Pini (PRP) and Radix Polygalae (RP). Each component is frequently used in different TCM formulae for their pharmacological efficacies against dysfunctions of the central nervous system (CNS). AT has been shown to exhibit a neuroprotective action and attenuates learning and memory deficits. PRP has been reported to possess sedative activity. RP shows repairing effects on the memory and behavioral deficits in rats, exhibits neuroprotective effects, enhances cognition and memory in elderly adults.

Herbs - Shi Chang Pu, Fu Shen, Yuan Zhi

* ZD-I FORMULA

ZD-I Formula treats Osteoarthritis at a cellular level. ZD-I improves the proliferative capacity of mesenchymal stem cells MSCs, implying that it could have a therapeutic benefit associated with microfracture to the repair focal, full-thickness chondral defect by stimulating MSCs. Furthermore, ZD-I inhibits the mineralization of human mesenchymal stem cells hMSCs through down-regulation of osteogenic markers.

Herbs - Niu Xi, Fang Ji, Da Huang, Wei Ling Xian, Gan Cao, Yan Hu Suo, Ci Wu Jia

1.3.3.51 RT-TCM-51

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_51

Aging Tcm Herbs-Molecules, External Ear Skin Tissue Vitality-TCM, Eyelids And Eyelashes TCM Formulation, Fat Metabolism-TCM, Fat Metabolism-TCM Short, Female Senior TCM Pelvic Floor Lift, Male Senior Pelvic TCM Floor Lift, Scalp Health Formula TCM-Molecules, Tendon Repair TCM

* AGING TCM HERBS-MOLECULES

ACTIONS - Promotes longevity, metabolic health, and cellular resilience.

PURPOSE - Promote longevity via senolytics, NAD+ support, and sirtuin activation. Enhance metabolic health through AMPK activation and insulin sensitization. Support detoxification and cellular resilience via NRF2 and methylation balance. Integrate TCM to nourish vital organs and balance systemic energy.

COMPONENTS
-Fisetin - Senolytic, antioxidant, anti-inflammatory
-Quercetin - Antioxidant, senolytic (with synergy to fisetin), mast cell stabilizer
-Metformin HCL - PK activator, insulin sensitizer, longevity candidate
-Berberine - AMPK activator, glucose metabolism, gut microbiome modulator
-Resveratrol - SIRT1 activator, antioxidant, mimics caloric restriction
ROLE - Cellular aging, metabolic optimization, and bioavailability enhancement. Fisetin and quercetin may clear senescent cells; metformin and berberine improve insulin sensitivity and mitochondrial function; resveratrol supports sirtuin pathways.

-Phosphatidylcholine, Cholesterol - Enhance bioavailability, support membrane integrity
ROLE - Phosphatidylcholine and Cholesterol serve as delivery enhancers or liposomal carriers.

-Huang Qi - Tonifies Qi and Blood
ROLE - Immunomodulation, telomere support (via astragaloside IV)

-Nicotinamide mononucleotide, TMG (Betaine), L-Sulforafane - NMN boosts NAD+ levels, TMG (Trimethylglycine/Betaine)ensures methylation balance (important when using NAD+ precursors), and sulforaphane activates protective genes via NRF2.
ROLE - Supports cellular detoxification, epigenetic health, and energy metabolism.

- Liu Wei Di Huang Wan Formula
- Shu Di Huang - Anti-inflammatory, neuroprotective
- Shan Zhu Yu - Antioxidant, anti-aging
- Shan Yao - Adaptogenic, supports digestion
- Fu Ling - Diuretic, immune support
- Mu Dan Pi - Anti-inflammatory, cardiovascular support
- Ze Xie - Lipid metabolism, diuretic
ROLE - Nourish kidney and liver essence, support immune and metabolic balance, and clear dampness and heat

NOTES
- Interactions: Metformin, berberine, and resveratrol may interact with medications or affect blood sugar.
- Bioavailability: Liposomal delivery (phosphatidylcholine/cholesterol) is used to enhance absorption.

- TCM complexity: Herbal synergy is key, but individual constitution matters in TCM.
- Pair with grounding (barefoot earth contact) to stabilize biofields and/or the 'Grounding' mp3 (RTS Rife Frequencies)

* EXTERNAL EAR SKIN TISSUE VITALITY-TCM

External ear changes in seniors (such as dryness, thinning, discoloration, or sagging) relate to Kidney and Liver decline, since these organs govern aging, hair, skin, and connective tissues.

The ears reflect Kidney health in TCM. Age-related changes (pale, thin, or sagging ears) suggest Kidney Jing depletion. Liver Blood deficiency can also lead to dry, brittle skin.

Here is a TCM formula to support external ear health:

Herbs for Skin & Tissue Vitality:

- He Shou Wu - Famous "anti-aging" herb that darkens hair, moisturizes skin, and strengthens tendons. Often used for dry, thinning, or wrinkled skin, including the ears.

- Gou Qi Zi - Nourishes Liver and Kidney Yin, supports collagen and skin hydration.

- Sang Shen - Rich in antioxidants, promotes blood circulation to skin.

- Dang Gui - Moisturizes dry skin and improves microcirculation.

* EYELIDS AND EYELASHES TCM FORMULATION

In Traditional Chinese Medicine (TCM), inflamed eyelids (blepharitis) and vanishing eyelashes (madarosis) are often associated with Internal Heat, Dampness, Blood Deficiency, or Liver / Kidney imbalances. Here’s a TCM formula approach for internal use to address these issues:

Formula Actions
- Reduces eyelid inflammation (Heat / Dampness).
- Nourishes Blood / Liver / Kidney to support eyelash regrowth.

Base Formula: Modified Long Dan Xie Gan Tang (Gentiana Drain the Liver Decoction)

- For Heat/Dampness in Liver Channel
- Long Dan Cao (Gentiana) - Clears Liver heat/damp
- Huang Qin (Scutellaria) - Clears heat, reduces inflammation
- Shan Zhi Zi (Gardenia) - Drains fire, cools blood

- Ze Xie (Alisma) - Resolves dampness
- Che Qian Zi (Plantago) - Clears damp-heat, promotes urination
- Dang Gui (Angelica Sinensis) - Nourishes blood, prevents excessive drying
- Sheng Di Huang (Rehmannia) -Cools blood, nourishes yin
- Ju Hua (Chrysanthemum) - Clears liver heat, benefits eyes
- Gou Qi Zi (Lycium Berry) - Nourishes liver/kidney, strengthens eyes

Modifications
- For Blood Deficiency (pale lids, dry eyes): + Bai Shao, Shu Di Huang.
- For Spleen Deficiency (fatigue, loose stools): + Bai Zhu, Huang Qi.
- For Severe Inflammation: + Jin Yin Hua, Lian Qiao.

* FAT METABOLISM-TCM

Fat-Breaking & Metabolism-Boosting Herbs
Lv Cha - Green Tea (rich in EGCG, promotes fat oxidation)
Jiao Gu Lan - Gynostemma pentaphyllum (AMPK activator)
Shan Zha - Hawthorn (lowers triglycerides, breaks down fats)
Ge Gen - Kudzu Root (contains puerarin, anti-obesity effects)
He Ye - Lotus Leaf (reduces lipid absorption, promotes lipolysis)

Blood-Activating & Anti-Cellulite Herbs
Dan Shen - Red Sage (improves microcirculation)
Jiang Huang - Turmeric (curcumin reduces fat inflammation)
Yan Hu Suo - Corydalis (pain relief, may help with lipomas)

Qi-Regulating & Dampness-Resolving Herbs
Bai Zhu - Atractylodes (strengthens Spleen, reduces dampness)
Chen Pi - Dried Tangerine Peel (regulates Qi, reduces bloating)
Jie Geng - Platycodon (resolves phlegm, aids fat metabolism)

* FAT METABOLISM-TCM Short

Shortened Formula
He Ye - Reduces lipid absorption, promotes lipolysis. (Fat-Breaking & Metabolism-Boosting Herbs)
Shan Zha - Lowers triglycerides, breaks down fats, (Fat-Breaking & Metabolism-Boosting Herbs)
Dan Shen - Improves microcirculation. (Blood-Activating & Anti-Cellulite Herbs)
Chen Pi - Rregulates Qi, reduces bloating. (Qi-Regulating & Dampness-Resolving Herbs)

* FEMALE SENIOR TCM PELVIC FLOOR LIFT

Bu Zhong Yi Qi Tang (Modified) + Kidney Yang Tonics. This formula strengthens the Spleen Qi (to lift pelvic muscles) and Kidney Yang (to improve vitality and circulation). Helps restoring female pelvic floor muscles and improving blood flow (especially in older adults) involves a combination of Qi-tonifying, Kidney-Yang-supporting, and blood-activating herbs. Pelvic floor dysfunction, urinary issues, or uterine pprolapse concerns in aging women often relate to Kidney Yang deficiency, Spleen Qi sinking, or Blood stagnation.

Key Differences in Female Pelvic Floor Issues

Women are more prone to:
- Uterine prolapse (due to childbirth, aging, or chronic Qi sinking).
- Stress urinary incontinence (from weakened Qi or Kidney Yang).
- Pelvic blood stagnation (contributing to pain, fibroids, or poor circulation).
- Postpartum or menopausal pelvic weakness (linked to Blood and Kidney Essence depletion).

TCM Herbal Formula: Bu Zhong Yi Qi Tang (Modified) + Kidney Yang Tonics. This formula strengthens the Spleen Qi (to lift pelvic muscles) and Kidney Yang (to improve vitality and circulation).

HERBS

Core Formula
-Huang Qi - Tonifies Qi, lifts sinking Spleen Qi, strengthens muscles.
-Dang Shen - Supports Qi and Spleen function.
-Bai Zhu - *Strengthens Spleen, resolves dampness.
-Sheng Ma - Lifts Qi to help with pelvic organ support.
-Chai Hu - Promotes Qi circulation, helps with lifting.

Uterine Support & Prolapse Prevention
-Yi Mu Cao - Activates Blood, resolves pelvic stagnation (helpful for postpartum or menstrual pain).
-Fu Pen Zi - Strong astringent for urinary incontinence, spermatorrhea, or vaginal discharge. Also tonifies Kidney Yang, making it ideal for pelvic weakness.
-Shan Yao - Tonifies Spleen and Kidney, mildly astringent (good for prolapse or loose stools). Less focused on leakage but excellent for overall pelvic support.
-Dang Gui - Nourishes Blood, supports uterine tone.

Menopausal/Kidney Yin-Yang Balance
-Shu Di Huang - (if Yin-deficient with dryness).
-Ba Ji Tian - (if Kidney Yang deficiency dominates).

For Blood Stagnation (Pelvic Pain, Fibroids)
-San Leng & E Zhu - Break Blood stasis.

Modifications
-Shan Yao - Tonify Qi and Blood after Postpartum weakness.
-Long Yan Rou - Tonify Qi and Blood after Postpartum weakness.
-Huang Bai - Chronic yeast infections/dampness.
-Bai Xian Pi - Chronic yeast infections/dampness.
-Zhi Ke - Pelvic organ prolapse (severe) + Huang Qi to enhance lifting.

* MALE SENIOR TCM PELVIC FLOOR LIFT

Bu Zhong Yi Qi Tang (Modified) + Kidney Yang Tonics. This formula strengthens the Spleen Qi (to lift pelvic muscles) and Kidney Yang (to improve vitality and circulation). Helps restoring male pelvic floor muscles and improving blood flow (especially in older adults) involves a combination of Qi-tonifying, Kidney-Yang-supporting, and blood-activating herbs. Pelvic floor dysfunction, urinary issues, or erectile concerns in aging men often relate to Kidney Yang deficiency, Spleen Qi sinking, or Blood stagnation.

HERBS

Core Formula
-Huang Qi - Tonifies Qi, lifts sinking Spleen Qi, strengthens muscles.
-Dang Shen - Supports Qi and Spleen function.
-Bai Zhu - *Strengthens Spleen, resolves dampness.
-Sheng Ma - Lifts Qi to help with pelvic organ support.
-Chai Hu - Promotes Qi circulation, helps with lifting.

Additions for Kidney Yang & Blood Flow:
-Xu Duan - Strengthens tendons, supports pelvic floor.
-Du Zhong - Tonifies Kidney Yang, strengthens lower back.
-Rou Gui - Warms Kidney Yang, improves circulation.
-Dan Shen - Activates blood, improves microcirculation.
- Niu Xi - Directs blood downward, supports pelvic circulation.

Modifications
-Yi Zhi Ren - For frequent urination/incontinence.
- Shan Yao - For frequent urination/incontinence.
-Yin Yang Huo - For erectile dysfunction.
-Ba Ji Tian - For erectile dysfunction.
-Hong Hua - For blood stagnation (pain/swelling).

* SCALP HEALTH FORMULA TCM-MOLECULES

An advanced scalp serum to support hair growth, strengthen follicles, improve scalp health, and enhance delivery of actives. This is an emulsion with liposomal and probiotic

fusion at a pH of ~5.5 (scalp-friendly).

* Water-Soluble Actives and Function
- Taurine - Cellular energy, anti-inflammatory
- Caffeine - Stimulates hair follicles, improves circulation
- MCT Oil C10 - Antimicrobial, supports nutrient absorption
- N-Chlorotaurine / N-Bromotaurine / Bromamine T - Antimicrobial, anti-inflammatory
- 2-Hydroxypropyl-β-cyclodextrin - Solubilizer, enhances delivery
- Dipalmitoylphosphatidylcholine - Liposome stabilizer
- Cationic lipid - Liposome formation, enhances penetration
- Cholesterol - Liposome membrane component
- Chitosan - Film-forming, antimicrobial
- Phosphatidylcholine (soy) - Liposome base
- Ethanol - Solvent, penetration enhancer
- N-Acetylcysteine - Antioxidant, detoxifying
- Niacinamide - Anti-inflammatory, improves barrier function
- Propylene glycol - Humectant, solvent

* Oil-Soluble Actives and Function
- Tributyrin - Anti-inflammatory, scalp microbiome support
- Baicalein - Tanshinone IIA / Cryptotanshinone / Dihydrotanshinone / TCM actives, anti-inflammatory, antioxidant
- Catalpol - Neuroprotective, hair follicle stimulation
- Dioleoylphosphatidylethanolamine - Lipid bilayer support
- Transcutol P - Solubilizer, enhances penetration
- Synthetic KRT6-KRT16 peptides - Keratin signaling, follicle stimulation
- Oleic acid - Emollient, penetration enhancer
- Phytosphingosine - Barrier repair, antimicrobial
- GHK-Cu - Peptide for hair growth and skin regeneration
- Hyaluronate Decasaccharide - Hydration, anti-aging
- 1-O-Acyl Ceramide - Barrier repair
- Ethyl Linoleate - Anti-inflammatory, lipid replenishment

* Probiotic-Liposome Fusion Complex and Function
- Lactobacillus ferment lysate - Microbiome support, anti-inflammatory
- Xylitol / Fructooligosaccharides - Prebiotics, microbiome balance
- Aqueous Core 5.5 Ph - Carrier for hydrophilic actives -Trehalose - Stabilizer, antioxidant

*Performance-Boosting Additives and Function
- Stearylamine - Liposome charge modifier, enhances delivery
- Alpha-Tocopherol - Antioxidant
-Tween80 - Emulsifier, solubilizer

* TCM Herbal Boost (hair thickness) and Function
*Shu Di Huang - Nourishes blood, supports hair growth

*He Shou Wu - Traditional hair tonic, anti-aging
*Huang Qin - Anti-inflammatory, antioxidant
*Dang Gui - Blood circulation, scalp nourishment

* TENDON REPAIR TCM

TCM formula for tendon repair especially for chronic tendinosis, stiffness, and weakness due to Liver / Kidney Deficiency, Blood Stagnation, or poor tendon nourishment.

HERB ACTIONS
-Sang Ji Sheng - Strengthens tendons, expels Wind-Damp, nourishes Liver / Kidney. Antioxidant, anti-inflammatory. Improves tendon elasticity, reduces stiffness, benefits joints.

-Ji Xue Teng - Invigorates Blood, relieves stagnation. Increases microcirculation, may support collagen synthesis. Enhances blood flow to tendons, reduces chronic pain.

-Du Zhong - Tonifies Kidney, strengthens bones/tendons. Contains aucubin (anti-inflammatory, promotes connective tissue repair) .Supports tendon and ligament healing. Strengthens bones and tendons.

-Niu Xi - Moves Blood downward, benefits knees/legs. Anti-arthritic, improves joint function. Directs herbs to lower body, reduces swelling Guides blood downward, good for leg pain.

-San Qi - Stops pain, resolves Blood stasis, promotes healing. Anti-inflammatory, enhances tissue repair. Reduces tendon inflammation,

Enhancements
+Gu Sui Bu - For bone/tendon healing.
+Rou Gui - For severe cold pain.

FORMULA ACTIONS
1. Nourishes Liver & Kidney (Sang Ji Sheng, Du Zhong) - Strengthens tendons long-term.
2. Invigorates Blood (Ji Xue Teng, Niu Xi, San Qi) - Breaks stagnation, improves circulation to damaged tendons.
3. Reduces Inflammation & Pain (San Qi, Du Zhong) - Accelerates healing.
4. Targets Lower Body (Niu Xi) - Guides herbs to legs/calves.

CAUTIONS
- Not for acute injuries with heat/redness.
- San Qi may thin blood (caution with anticoagulants).
- Niu Xi is contraindicated in pregnancy.

1.3.3.52 RT-TCM-52

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_52

Dao Chi San, Fu Zi Li Zhong Wan, Gui Lu Er Xian Jiao, Jiangtangshuluofang, Qing Fei Yi Huo Tang-Modified for Smoking Cessation, Qing Wei San, Si Wu Tang-Modified for Ichthyosis, Xie Huang San, Yu Nu Jian,

* DAO CHI SAN - 導赤散 - Guide Out the Red Powder. Rehmannia and Akebia Formula. Powder to Conduct Heart Fire Downwards. Conduct the Redness (Heat) Powder. Powder of Fresh Rehmannia and Clematis Stem to Conduct Fire Downward. Fire-Inducing Powder

FORMULA ACTIONS - Clears the Heart. Nourishes Yin. Promotes urination. Relieves Lin Syndrome

SYNDROMES - Heart Fire Flaring Up. Small Intestine Excess Heat Heart. Kidney Yin Deficiency. Heat in the Heart and Small Intestine Channels

CLINICAL MANIFESTATIONS - Irritability with a sensation of Heat in the chest. Thirst with a desire to drink cold beverages. Red face. Fever. May be sores around the mouth. Dark, scanty urine. Rough urination. Fidgeting. Warm sensations in the chest. Sores on the tongue. Painful urination (stabbing). Urination short and hesitant. Hematuria. Oliguria. Maybe blood in the urine. Sluggish urination. Irritability. Fatigue.

HERBS AND ACTIONS

-Sheng Di Huang - Cools Heart Fire, nourishes Yin, cools Blood and generates Fluids.

-Mu Tong - Clears Heat from the Heart channel and clears Heat and promotes urination through the Small Intestine channel. With Dan Zhu Ye and Sheng Di Huang, for mouth ulcers, burning throat pain, irritability and insomnia due to Heart Fire.

-Dan Zhu Ye - Alleviates irritability by clearing Heat from the Heart. With Mu Tong and Sheng Di Huang, for Heat in the Heart channel manifesting as chest Heat and irritability, mouth and tongue sores and dark, scanty urine.

-Gan Cao - The tips treat painful urinary dysfunction, relieve toxicity and harmonize.

TREATS - Stomatitis. Nightmares. Acute urinary tract infections. Urethritis. Cystitis. Acute glomerulonephritis. Herpes zoster. Oral cavity infection. Infertility. Prostatitis. Amenorrhea. Blepharitis. Dizziness. Oliguria. Constipation. Anxiety neurosis. Panic

disorder. Neurasthenia. Tinnitus. Low back pain. Congestive Heart failure. Bad breath. Myalgic encephalomyelitis. Gonorrhea. Tongue pain. Deafness. Oral herpes. Tongue ulcers. Canker sores. Thrush. Dysuria. Infectious parotitis. Exanthema maculosum. Acute eczema. Prostatic hypertrophy. Pterygium. Hematuria. Senility. Alzheimer's disease. Depression. Bi-polar disorder. Neurosis. Fatigue. Glossitis. Spermatorrhea. Strangury. Toothache. Epstein-Barr virus syndrome. Red eyes. Sore throat.

CONTRAINDICATIONS - Use caution for those with Spleen and Stomach Deficiency. This formula may not be appropriate for those with repetitive stomatitis.

* FU ZI LI ZHONG WAN - 附子理中丸 - Prepared Aconite Pill to Regulate the Middle. Aconite, Ginseng and Ginger Combination.

FORMULA ACTIONS - Warms Yang. Dispels Cold. Tonifies Qi. Strengthens the Spleen

SYNDROMES - Colon Cold. Spleen Yang Deficiency. Spleen and Stomach Deficiency Cold. Stomach Cold. Spleen and Kidney Yang Deficiency. Tai Yin Deficiency with Cold

CLINICAL MANIFESTATIONS - Severe abdominal and epigastric pain (likes pressure). Cold body. Diarrhea with undigested food. Aversion to Cold. Cold and stiff or rigid extremities. Reduced appetite. Fullness in the epigastrium and abdomen (likes pressure). Lack of thirst. Maybe scanty urine with edema. Nausea and vomiting. Loose stools. Trismus. Constipation (Cold type). Gastric spasms. Mild perspiration. Maybe syncope. Maybe abundant clear urine

HERBS AND ACTIONS

-Gan Jiang - Warms the Spleen and Stomach and eliminates interior Cold. With Gan Cao, for vomiting and epigastric pain due to Spleen and Stomach Deficiency Cold. With Bai Zhu, for diarrhea due to Spleen Deficiency. With Bai Zhu and Ren Shen, for Spleen Yang Deficiency with a cold abdomen, vomiting, and diarrhea. With Fu Zi, counteracts the Internal consequences of an External Wind-Cold attack, warms the Spleen and Kidneys, benefits Yang, and disperses Cold for debilitated Spleen and Kidney Yang with incessant diarrhea, Devastated Yang, overabundance of Yin fluids due to Deficiency Cold and Cold-Damp Bi .

-Ren Shen - Tonifies Yuan Qi, reinforces Yang and harmonizes the middle Jiao. With Fu Zi, for Collapsed Qi and Devastated Yang (spontaneous sweat, ice cold extremities, shortness of breath, etc.). With Bai Zhu, tonifies the transformation and transportation functions of the Spleen.

-Bai Zhu - Tonifies the Spleen, tonifies Qi and dries Dampness. With Ren Shen, tonifies the Spleen and Stomach and dries Dampness. With Gan Jiang, eliminates Cold Dampness in the Spleen with loss of taste, a sticky sensation in the mouth, nausea, vomiting, diarrhea and a thick,white tongue coat and treats bleeding due to Deficiency

of Spleen Yang with hemafecia or hematuria and frequent diarrhea due to Spleen/ Stomach Deficiency Cold.

-Fu Zi - Restores Kidney and Heart Yang, relieves pain, disperses Cold, dispels Dampness and warms the Spleen. With Bai Zhu and Gan Jiang, for Cold abdominal pain with watery diarrhea. With Gan Jiang and Gan Cao, strengthens its actions of fortifying Qi and benefiting the Yang for cold extremities and diarrhea with undigested food due to Collapse of the Spleen and Kidney Yang. With Ren She, Bai Zhu and Gan Jian, for Spleen Yang Deficiency. With Ren Shen, Gan Cao and Gan Jiang, for Heart Yang collapse with vomiting, a fading pulse, icy extremities and profuse perspiration.

-Gan Cao - Tonifies the Qi of the Middle Jiao and harmonizes. With Ren Shen, relieves palpitations and anxiety.

CONTRAINDICATIONS - Contraindicated for those with External invasion with fever. For those with sudden turmoil disorder, stop when diarrhea and vomiting have stopped. Contraindicated for those with Yin Deficiency. Contraindicated during pregnancy.

TREATS
Acute gastritis. Chronic gastritis. Acute or chronic gastroenteritis. Gastrectasis. Gastric or duodenal ulcers. Gastroptosis. Irritable bowel syndrome. Chronic colitis. Sudden turmoil disorder with muscle spasms. Gastroatonia. Gastralgia. Dysentery. Enteritis. Dysmenorrhea. Infertility. Hypothyroidism. Vaginal discharge. Stomach cancer. Polyuria. Alzheimer's disease. Diarrhea. Anemia. Somnolence. Narcolepsy. Celiac disease. Neurasthenia. Tinnitus. Chronic hepatitis. Low back pain. Hemafecia. Chronic peptic ulcer. Forgetfulness. Vertigo. Hypotension. Weakness. Edema. Prostatic hypertrophy. Chronic prostatitis. Chronic hepatitis. Menopause. Ascites. Strangury. Ulcerative colitis. Leukopenia. Nausea/Vomiting. Infantile diarrhea. Cholera. Chronic oral ulcers due to Spleen and Stomach Deficiency Cold. Toxemia during pregnancy. Nervous vomiting in children. Bleeding. Hemorrhoidal bleeding. Indigestion. Constipation (Cold type). Stomach prolapse. Rectal prolapse. Acid reflux. Keratomalacia. Abdominal pain. Postpartum pain. Endometriosis. Raynaud's disease. Abdominal fullness and distention. Colitis. Oliguria. AIDS/HIV. Addison's disease. Behcet's disease. Chronic fatigue syndrome. Abdominal Cold. Crohn's disease. Deafness. Otitis media. Chronic glomerulonephritis. Reduced appetite. Hemorrhoids. Dizziness. Thrombocytopenic purpura. Fatigue. Dysphagia. Chronic nephritis. Nephrotic syndrome. Intestinal tuberculosis. Gastric spasms. Abdominal fullness and distention. Hydrocephalus. Cirrhosis of the Liver.

* GUI LU ER XIAN JIAO - 龟鹿二仙胶 - Tortoise and Deer Two Immortals Glue

A renowned TCM tonic formula that deeply nourishes Kidney Jing (Essence), strengthens Yang and Yin, and supports longevity. It is especially used for deficiency syndromes related to aging, impotence, infertility, and weak bones.

HERBS AND FUNCTIONS
-Gui Ban - Nourishes Kidney Yin, strengthens bones, and replenishes Jing.
-Lu Jiao - Warms Kidney Yang, boosts vitality, and strengthens tendons/bones.
-Ren Shen - Greatly tonifies Qi, enhances immune function, and supports energy.
-Gou Qi Zi - Nourishes Liver and Kidney Yin, benefits eyesight, and supports Jing.

TCM ACTIONS & INDICATIONS
- Tonifies Kidney Jing (Essence) and Bone Marrow - For weak bones, osteoporosis, or delayed development.
- Boosts Yang and Nourishes Yin - Balances both aspects of Kidney energy (unlike single-direction tonics).
- Enhances sexual function - Used for impotence, low libido, infertility (male & female), and premature aging.
- Supports recovery from chronic illness or severe deficiency - Helps rebuild vitality after long-term sickness.

APPLICATIONS
Osteoporosis or arthritis (due to Kidney Jing deficiency).
Male sexual dysfunction (erectile dysfunction, low sperm count).
Female infertility, menopausal weakness, or hormonal imbalances.
Chronic fatigue, adrenal exhaustion, or post-illness recovery.
Anti-aging & longevity support (historically used by the elderly to maintain vitality).

CONTRAINDICATIONS/CAUTIONS

Not for excess heat or damp-heat conditions (e.g., infections, inflammatory disorders).
Caution in hypertension (due to Ren Shen's potential to raise blood pressure in sensitive individuals).
Avoid in early pregnancy unless prescribed by a TCM practitioner.

* JIANGTANGSHULUOFANG - Decrease Glucose Free Collaterals Prescription (Dr. Dashun Chen)

Hyperglycemia reproduces a pattern of apoptosis in Schwann cells. The application of Jiangtangshuluofang normalizes levels of serum insulin and glycosylated hemoglobin and inhibits the apoptosis of Schwann cells surrounding sciatic nerves. The mechanism is thought to be related to the inhibition of proapoptotic factors caspase-3 and Bax and promoting of expression of Bcl-2, an antiapoptotic factor.

TCM views of the etiology and pathogenesis of Diabetic Peripheral Neuropathy: With an increased duration of disease in diabetes, a Deficiency of Yin burns body fluid and blood, resulting in Empty Heat. This increases blood viscosity, resulting in Blood Stasis, as well as blockage of sinews and channels; excessive intake of foods high in fat and sugar content results in the Deficiency of Spleen and Stomach, resulting in the accumulation of Dampness and Phlegm, which has a synergistic effect with stasis;

sinew and channels demonstrate poor nourishment because of the deficiency of Liver and Kidney; the Deficiency of Yin results in a deficiency of Yang, which generates an inner cold that results in microvascular coagulation. These four aspects result in a decreased peripheral flow of Qi and Blood to muscles, sinew, and channels. With regard to visceral organ systems, DPN is related to the Liver, Spleen, and Kidney. The nature of DPN is Deficiency secondarily complicated by Excess; the Deficiency is the root, and the Excess is a subsequent manifestation. The root cause is Deficiency in Qi, Yin, and yang; the subsequent complication is Blood Stasis and Phlegm accumulation.

Indication
Diabetic Peripheral Neuropathy, pattern of Deficiency of Qi and Yin. Fluid Deficiency Heat and Blood Stasis, Deficiency of Blood turning into Wind.

Function
Nourish Yin tonify Qi, clear Heat and moisten dryness, activate Blood and remove stasis, dispel Wind and free collaterals.

Actions
-Shengdihuang, Shanzhuyu, Gouqi zi and Gegen regender fluid and clear heat, nourish yin of liver, kidney and lung.
-Huangqi tonifies Qi. Danshen, Puhuang and Shuizhi remove stasis and free collaterals.
-Huanglian clears heat. Chantui and Jili relieve itching.

Herbs - Shengdihuang, Shanzhuyu, Gouqizi, Gegen, Huangqi, Danshen, Puhuang, Shuizhi (Hirudo), Huanglian, Chantui, Jili

* QING FEI YI HUO TANG (清肺抑火汤) Modified for Smoking Cessation

Compulsive cigarette smoking, viewed through Traditional Chinese Medicine (TCM), is considered a disorder of both the body and mind, often linked to Phlegm-Heat, Lung and Spleen imbalances, Liver Qi stagnation, and Heart Fire. Qing Fei Yi Huo Tang is a classical TCM formula designed to clear Lung Heat, resolve Phlegm, and purge Fire - making it particularly relevant for smokers suffering from heat-toxin accumulation (e.g., chronic cough, yellow phlegm, dry throat, and irritability).

This formula helps detoxify the Lungs while addressing the Heat and Phlegm driving addiction. Combine with Liver-soothing and Shen-calming herbals (e.g., Xiao Yao San or Tian Wang Bu Xin Dan also available).

Indications for Smokers
- Persistent cough with yellow, sticky phlegm
- Dry mouth, sore throat (from smoking-induced Lung Heat)
- Irritability, restlessness (Heart Fire agitation)
- Constipation or dark urine (internal Heat signs)

Composition & Key Herbs
-Huang Qin - Clears Lung and Upper Jiao Heat.
-Zhi Zi - Drains Fire, especially from Heart and Lungs.
-Sang Bai Pi - Clears Lung Heat, stops cough.
-Xing Ren - Descends Lung Qi, relieves wheezing.
-Gua Lou - Resolves Phlegm-Heat in the chest.
-Chuan Bei Mu - Transforms sticky Phlegm.
-Da Huang - Purges excess Heat (used if constipation present).
-Jie Geng - Directs herbs upward to the Lungs.

Modifications for Smoking Cessation
1. For severe cravings (Heart Fire) - Lian Zi Xin, Zhu Ru.
2. For Liver Qi stagnation (mood swings) - Chai Hu.
3. For weak Spleen (fatigue, dampness) - Bai Zhu. Fu Ling.
4. For Yin deficiency (dryness - Mai Dong, Sha Shen.

Cautions
- Not for Cold or Deficient patterns (e.g., weak cough with clear phlegm, fatigue).
- Da Huang (Rhubarb) is purgative (stop if diarrhea occurs).

* QING WEI SAN - 清胃散 - Clear the Stomach Powder Also Known As: Coptis and Rehmannia Formula Powder for Clearing Away Stomach

Heat HERBS AND ACTIONS

-Huang Lian - Clears Stomach Fire, drains Heat, relieves toxicity and stops bleeding.

-Sheng Ma - Relieves toxicity, raises and disperses Heat and guides other herbs upwards. With Huang Lian, clears and drains Heart and Stomach Fire with gum swelling, toothache and ulcerations of the mouth and tongue. With Sheng Di Huang, for toothache from Stomach Fire.

-Mu Dan Pi - Cools the Blood and clears Heat. With Sheng Di Huang, for Ying and Xue Stage Heat with a high fever, scarlet tongue, thirst, a rash all over the body, epistaxis and hemoptysis or residual Warm pathogen which has injured the Yin and Kidney Yin Deficiency with steaming bones.

-Sheng Di Huang - Cools the Blood, nourishes Yin, cools Heart Fire and generates Fluids. With Sheng Ma, cools Heat in the Lungs and Stomach stopping hemoptysis and hematemesis.

-Dang Gui - Reduces swelling, expels pus, generates flesh and alleviates pain.

FORMULA ACTIONS - Drains Stomach Fire Cools Blood Nourishes Yin

SYNDROMES - Stomach Fire Blazing Stomach Heat

CLINICAL MANIFESTATIONS - Toothache (especially when pain extends into the head) Toothache is worse with Heat and better with Cold Facial swelling Fever Bad breath Dry mouth and tongue Bleeding gums Sores on the gums Maybe scanty, red urine Swollen, painful tongue Swollen, painful lips Swollen, painful jaw Pain is better with Cold and worse with Heat Swelling and pain of the throat Feverish cheeks Temporal headache.

CONTRAINDICATIONS - Contraindicated for those with toothache due to Wind-Cold. Contraindicated for those with toothache tooth and gum problems due to KI Deficiency.

TREATS - Stomatitis Gingivitis. Ulcerative gingivitis. Trigeminal neuralgia. Periodontal disease. Periodontitis, Acid regurgitation. Hordeolum. Acne. Oliguria. Constipation. Nause / Vomiting. Chronic pancreatitis. Gastritis. Hiccups. Indigestion. Nasal pain. Hangover. Glossitis. Idiopathic halitosis. Toothache. Infections affecting the head. Swelling of the larynx and pharynx. Halitosis. Epistaxis. Gastralgia. Stomach cancer. Hematuria. Fever. Acute pancreatitis. Peptic ulcer. Cholecystitis. Acute infectious gastroenteritis. Temporomandibular joint syndrome (TMJ). Lip pain.

* SI WU TANG (四物汤) Modified for Ichthyosis (Fish Scale Skin)

Si Wu Tang (Four Substances Decoction) is a classic blood-nourishing formula in Traditional Chinese Medicine (TCM), traditionally used for blood deficiency, dry skin, and menstrual disorders. Since ichthyosis is characterized by excessive dryness, scaling, and impaired skin barrier function, a modified Si Wu Tang can help by nourishing blood, promoting moisture, and improving skin metabolism.

Core Ingredients (Si Wu Tang - Blood Tonic)

- Shu Di Huang (熟地黄) - Rehmannia (nourishes blood & Yin)
- Dang Gui (当归) - Angelica sinensis (promotes blood circulation)
- Bai Shao (白芍) - White peony root (softens liver, relieves dryness)
- Chuan Xiong (川芎) - Ligusticum (activates blood, reduces stasis)

Additions for Ichthyosis (Key Modifications)

- He Shou Wu (何首乌) - Fo-ti root (nourishes blood, improves skin & hair)
- Mai Men Dong (麦门冬) - Ophiopogon (moistens lung & skin Yin)
- Tian Men Dong (天门冬) - Asparagus root (clears lung heat, moistens)
- Dan Shen (丹参) - Salvia (improves microcirculation in skin)
- Di Gu Pi (地骨皮) - Lycium root bark (clears deficient heat, reduces itching)
- Bai Xian Pi (白鲜皮) - Dictamnus (anti-inflammatory, relieves itching)

SYNDROMES - Blood deficiency with dryness. Lung & Kidney Yin deficiency (affecting skin moisture). Blood stasis (leading to thickened, scaly skin)

FORMULA ACTIONS - Nourishing blood & Yin (to moisturize skin). Promoting blood circulation (to reduce scaling). Clearing mild heat/wind (to relieve itching)

* XIE HUANG SAN - 瀉黃散 - Drain the Yellow Powder. Xie Pi San. Drain the Spleen Powder. Ledebouriella and Gardenia Formula. Powder for Expelling Hidden Fire of the Spleen and Stomach. Spleen Heat Expelling Powder

FORMULA ACTIONS - Drains Latent Fire from the Spleen and Stomach

SYNDROMES - Latent Fire in the Spleen and Stomach

CLINICAL MANIFESTATIONS - Mouth ulcers. Bad breath. Thirst. Frequent hunger. Dry mouth and lips. Epistaxis. Tongue thrusting in children. Irritability.

HERBS AND ACTIONS

-Shi Gao - Clears Heat in the Qi Stage, drains Fire, relieves irritability, quenches thirst and clears Blazing Stomach Fire.

-Zhi Zi - Clears Heat, reduces Fire, eliminates irritability and resolves Dampness.

-Fang Feng - Releases the exterior, expels External Wind, raises Yang, expels Wind-Dampness and alleviates pain.

-Huo Xiang - Aromatically transforms Dampness, releases the Exterior, dispels Summerheat and transforms turbidity.

-Gan Cao - Clears Heat and relieves Fire toxicity and moderates and harmonizes the harsh properties of other herbs.

CONTRAINDICATIONS - Contraindicated for those with Stomach Yin Deficiency. Contraindicated for those with tongue thrusting due to congenital Qi Deficiency.

NOTES - This formula has shown to reduce fever, relieve inflammation, tranquilize the mind, promote diuresis and promote the secretion of gastric juice.

TREATS - Aphthous ulcers. Acute gastritis with halitosis. Behcet's disease. Oral thrush. Hordeolum. Atopic dermatitis. Myalgic encephalomyelitis. Lip pain. Ulcerating stomatitis. Halitosis. Rosacea. Eczema. Fever. Epistaxis. Epstein-Barr virus syndrome. Tongue pain.

* YU NU JIAN - 玉女煎 - Jade Woman Decoction. Rehmannia and Gypsum Combination. The Fair Maiden Decoction. Gypsum Decoction

FORMULA ACTIONS - Drains Heat from the Stomach Replenishes Yin

SYNDROMES - Stomach Heat with Yin Deficiency due to Stomach Fire Injuring the Kidney Yin

CLINICAL MANIFESTATIONS - Toothache. Loose teeth. Bleeding gums. Frontal headache. Irritability. Fever. Thirst with a desire to drink cold beverages. Epistaxis. Dysphoria. Excess hunger. Hemoptysis. Dry throat. Hematemesis. Restlessness. Night sweats. Warm sensations.

HERBS AND ACTIONS

-Shi Gao - Clears Fire from the Stomach, relieves irritability, fever and thirst and is specific for toothache due to Stomach Fire. With Zhi Mu, for high fever from Wind-Heat or Qi Stage Heat or Yang Ming Heat with irritability and extreme thirst and epidemic diseases. With Shu Di Huang, for headache, toothache, and thirst due to raging fire caused by devastated Yin.

-Shu Di Huang - Nourishes Kidney Yin to cool Stomach Fire.

-Zhi Mu - Clears Heat from the Qi Stage, from the Lungs and from the Stomach, nourishes Yin, moistens Dryness, Generates Fluids, clears Deficiency Fire and quenches thirst. With Shi Gao, clears Heat from the Stomach and nourishes Yin.

-Mai Dong - Nourishes Yin in the Upper and Middle Jiaos. moistens the Stomach, generates fluids and alleviates irritability.

-Niu Xi - Conducts Heat downward and stops bleeding in the mouth.

CONTRAINDICATIONS - Contraindicated for those with diarrhea or loose stool.

TREATS - Toothache. Gingivitis. Stomatitis. Glossitis. Trigeminal neuralgia. Chronic gastritis. Headache. Stomach flu. Bleeding peptic ulcers. Chronic colitis. Acid reflux. Hyperglycemia. Behcet's disease. Tinnitus. Acute pancreatitis. Peptic ulcer. Allergic purpura. Indigestion. Tongue pain. Periodontitis. Diabetes mellitus. Oral inflammation. Epistaxis. Hyperthyroidism. Viral myocarditis. Hemoptysis. Dysentery. Hemafecia. Stomach cancer. Hematemesis. Fever. Thrombocytopenic purpura. Pneumonia. Chronic pancreatitis. Cholecystitis. Night sweats. Dysmenorrhea.

1.3.3.53 RT-TCM-53

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_53

Ding Chuan Tang, Gan Mai Da Zao Tang, Kong Sheng Zhen Zhong Dan, Shen Ling Bai Zhu San, Shen Tong Zhu Yu Tang, Sheng Mai Yin Wan, Suan Zao Ren Tang, Tian Ma Gou Teng Yin, Tian Wang Bu Xin Dan

* DING CHUAN TANG - 定喘汤 - Arrest Wheezing. Ma Huang and Ginkgo Combination. Ma Huang and Ginkgo Combination for Stabilizing Dyspnea. Asthma Relieving Decoction. Decoction for Asthma

ACTIONS - Disseminates and descends Lung Qi. Stops asthma (wheezing). Stops cough. Clears Heat. Transforms Phlegm

SYNDROMES - Exogenous Wind-Cold Turning to Interior Phlegm-Heat

CLINICAL MANIFESTATIONS - Coughing and wheezing. Copious, thick yellow, difficult to expectorate sputum. Labored breathing. Aversion to Cold. Fever or fever and chills. Spontaneous sweat. Red face. Thirst with a preference for cold beverages. Fidgeting. Restlessness. Dyspnea. Thirst with a desire to drink. Headache. Rapid breathing.

CONTRAINDICATIONS - Contraindicated for those with Wind-Cold with no sweat and internally contracted Phlegm-Heat. Don't use too long in acute situations. Contraindicated for those with chronic asthma with Qi Deficiency and a frail pulse. Use with caution in early stages of a Wind Invasion showing dyspnea with Anhidrosis. Contraindicated for those with chronic wheezing or cough caused by Lung and Kidney Yin Deficiency.

HERBS AND ACTIONS

-Bai Guo - Astringes the Lungs, stops asthma, stops cough, transforms Phlegm and prevents Ma Huang from causing excessive dispersion and depletion. With Ma Huang, calms wheezing With Sang Bai Pi, Xing Ren and Ma Huang for cough and wheezing with excessive yellow sputum due to Lung Deficiency with Hot Phlegm.

-Ma Huang - Releases the exterior, disperses Cold, unblocks and descends Lung Qi, warms and disperses Cold pathogens and stops wheezing. With Xing Ren for Wind-Cold cough and wheezing with copious sputum due to congested fluids.

-Zi Su Zi - Stops cough and wheezing, dissolves Phlegm and descends Lung Qi. With Zhi Ban Xia and Kuan Dong Hua assists in descending Qi, stopping wheezing, and expelling Phlegm. with Xing Ren, for cough and wheezing with constipation.

-Gan Cao - Resolves Phlegm, stops cough, clears Heat and moderates and harmonizes the harsh properties of other herbs. With Ma Huang and Xing Ren, for coughing or wheezing due to Wind-Cold Attacks the Lungs.

-Kuan Dong Hua - Moistens the Lungs, descends Qi, stops cough and transforms Phlegm. With Xing Ren for cough and wheezing due to Phlegm obstruction. Sm. Armeniacae Xing Ren - Stops cough and asthma, resolves Phlegm and assists Ma Huang in arresting wheezing and expanding the Lungs. With Sang Bai Pi, for productive cough, wheezing and hoarseness due to Lung Heat. With Ma Huang and Gan Cao, for cough with profuse sputum, nasal obstruction and a hoarse voice.

-Sang Bai Pi - Drains Heat from the Lungs, stops cough and calms wheezing. With Huang Qin, drains Heat from the Lungs, and stops cough and wheezing.

-Huang Qin - Cleans the Lungs and sedates Heat. Rz. Pinelliae Preparatum Zhi Ban Xia - Dries Dampness, transforms Phlegm, and stops cough. With Huang Qin, for Phlegm-Heat induced Rebellious Qi with cough, nausea, and vomiting.

TREATS - Acute or chronic bronchitis. Bronchial asthma. Bronchiolitis. Emphysema complicated by infection. Cough. Pertussis. Headache. Common cold. Pulmonary emphysema. Bronchiopneumonia. Chronic prostatitis. COPD. Fever. Dyspnea.

* GAN MAI DA ZAO TANG - 甘麥大棗湯 - Licorice, Wheat and Jujube Decoction. Licorice and Jujube Combination

HERBS AND ACTIONS

-Gan Cao - Tonifies the Spleen and augments Qi, clears Heat and relieves Fire toxicity, moderates spasms and alleviates pain. With Da Zao and Xiao Mai, for restless organ syndrome.

-Xiao Mai - Nourishes Heart Qi and eliminate irritability to treat irritability, restlessness and insomnia as in restless organ disorder. With Gan Cao and Da Zao, for emotional disorders, disorientation, emotional instability, and irritability due to mild Deficiency of the Spleen Qi and Heart Blood.

-Da Zao - Tonifies the Spleen and Stomach, augments Qi, nourishes the Blood and calms the Spirit.

ACTIONS - Nourishes the Heart. Calms the Shen. Harmonizes the Middle Jiao. Relieves acute conditions. Relaxes tension. Tonifies Spleen Qi

SYNDROMES - Heart Blood Deficiency with Liver Qi Stagnation. Restless Organ Syndrome. Dry Organ disorder

CLINICAL MANIFESTATIONS - Absent-mindedness. Frequent feelings of extreme sadness with an urge to cry. Inability to control one's emotions. Depression. Restless sleep. May be night sweats. Lack of mental focus. Tight abdominal muscles. Irritability.

Abnormal speech or behavior. Disorientation. Frequent yawning. Sadness. Overly sensitive or self-conscious Insomnia.

TREATS - Neurosis. Neurasthenia. Epilepsy. Infantile night crying. Depression. Gastrointestinal spasms. Chorea. Uterine cramping. General anxiety disorder. Attention deficit hyperactivity disorder. Parkinson's disease. Migraines. Ectopic heartbeats. Convulsions Bi-polar disorder. Somnambulism. Yawning. Impotence. Hysteria. Autonomic dystonia. Schizophrenia. Menopause syndrome. Enuresis. Insomnia. Sleep walking. Coughing due to spasms of the trachea. Night terrors in children. Nervous exhaustion. Spasms of the extremities. Sinus tachycardia. Mania. Premenstrual syndrome. Globus hystericus. Celiac disease. Hoarseness. Male menopause.

* KONG SHENG ZHEN ZHONG DAN - 孔圣枕中丹 - Confucius' Sage Wisdom Pillow

A classic Traditional Chinese Medicine (TCM) formula primarily used to improve cognitive function, memory, and concentration. It is named after Confucius (Kong Sheng), reflecting its traditional use by scholars and students to enhance mental clarity.

HERBS AND FUNCTIONS
-Shi Chang Pu - Opens the orifices, resolves phlegm, and calms the spirit.
-Yuan Zhi - Benefits intelligence, calms the heart, and resolves phlegm.
-Long Gu - Anchors the spirit, calms the mind, and stops excessive dreaming.
-Gui Ban - Nourishes Yin, tonifies the kidneys, and supports memory.

TCM ACTIONS & INDICATIONS
- Tonifies Heart and Kidney connection (Heart-Kidney imbalance leading to poor memory).
- Calms the Shen (Spirit) - Helps with anxiety, restlessness, and insomnia.
- Enhances memory and learning - Traditionally used for forgetfulness, poor concentration, and "brain fog.
- Supports cognitive function in students or elderly individuals.

APPLICATIONS
ADHD, poor memory, and learning difficulties (often combined with other formulas).
Insomnia with excessive dreaming or mental restlessness.
Age-related cognitive decline or mild dementia (as an adjunct therapy).

CONTRAINDICATIONS/CAUTIONS
- Not suitable for excessive phlegm-damp or heat patterns without modification.
- Pregnancy: Use with caution (some ingredients may have strong effects).

* SHEN LING BAI ZHU SAN - 參苓白術散 - Ginseng, Poria and Atractylodis Macrocephalae Powder. Ginseng and Atractylodes Formula

FORMULA ACTIONS - Augments Qi. Strengthens the Spleen. Resolves Dampness. Stops diarrhea

SYNDROMES - Lung and Spleen Qi Deficiency. Dampness due to Spleen Qi Deficiency. Atrophy disorder (Wei Syndrome) due to Spleen and Stomach Qi Deficiency

CLINICAL MANIFESTATIONS - Loose stools or watery diarrhea. Weak extremities. Weight loss. Distention and a stifling sensation in chest and epigastrium. Pale wan complexion. Abdominal distention. Indigestion. Vomiting. Fatigue. Chills. Maybe vomiting. Leukorrhea. Reduced appetite. Borborygmus. Edema. Reduced appetite. Diarrhea with onset of menstrual flow. Cough with copious sputum. Leukorrhea in obese women.

HERBS AND ACTIONS

-Ren Shen - Strongly tonifies Spleen and Lung Qi. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu and Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency with anorexia, diarrhea, vomiting, abdominal distention and fatigue.

-Bai Zhu - Strengthens the Spleen and dries Dampness. With Fu Ling and Yi Yi Ren, for Spleen and Stomach Deficiency with Dampness. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency. With Ren Shen, Fu Ling, Yi Yi Ren and Sha Ren, for diarrhea due to Spleen and Stomach Deficiency with Dampness.

-Fu Ling - Dries Dampness, strengthens the Spleen, harmonizes the Middle Jiao and transforms Phlegm. With Bai Zhu, strengthens the Spleen and dries Dampness. With Ren Shen and Bai Zhu, for a weak and deficient Spleen with fatigue, anorexia and loose stools.

-Gan Cao - Harmonizes, warms and strengthens the Middle Jiao. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency.

-Shan Yao - Tonifies the Spleen and Lungs and stops diarrhea. With Fu Ling and Bai Zhu, for Spleen Deficiency with loose, watery stools. With Dang Shen, for Spleen and Kidney Deficiency with fatigue, weakness, anorexia, and watery stools. With Ren Shen and Bai Zhu, for decreased appetite and lack of energy due to Spleen Deficiency.

-Bai Bian Dou - Strengthens the Spleen and resolves Dampness. With Lian Zi, strengthens the Spleen and stops diarrhea. With Bai Zhu and Shan Yao, for diarrhea or vaginal discharge due to Spleen Deficiency. With Ren Shen, Fu Ling, Bai Zhu and Yi Yi Ren, for Spleen and Stomach Deficiency with Dampness.

-Lian Zi - Tonifies the Spleen and astringes diarrhea. With Ren Shen, Bai Zhu and Shan Yao, for chronic Spleen Deficiency diarrhea. With Dang Shen, Fu Ling and Bai Zhu , for Spleen Deficient diarrhea with poor appetite.

-Yi Yi Ren - Strengthens the Spleen, drains Dampness and transforms Phlegm. With Fu Ling, for Spleen Deficiency with Excess Dampness and edema. With Fu Ling and Bai Zhu, for Spleen Deficiency diarrhea. with Fu Ling, Bai Zhu and Shan Yao, for Spleen and Stomach Deficiency with loose stools and reduced appetite.

-Sha Ren - Aromatically transforms Dampness, moves Qi and stops diarrhea, allowing the formula to tonify without stagnating. With Bai Zhu and Dang Shen, for abdominal pain and diarrhea due to Dampness Obstructing the Spleen and Stomach and morning sickness. With Bai Zhu and Ren Shen, for Spleen and Stomach Deficiency.

-Jie Geng - Unblocks Lung Qi and expels Phlegm. With Zhi Gan Cao, disseminates Lung Qi, expels Phlegm, resolves toxicity, and expels pus for productive cough with hoarseness, pain and swelling of the throat due to Wind-Heat and Lung abscess with expectoration of pus and pain in the chest and flanks. With Gan Cao and Yi Yi Ren, for Lung abscess with chest pain, fever, cough with foul-smelling, yellow, sticky sputum.

TREATS - Chronic gastritis. Chronic hepatitis. Chronic bronchitis. Chronic nephritis. Chronic glomerulonephritis. Diabetes mellitus. Malabsorbtion syndromes. Malnutrition (especially in children). Chronic gastroenteritis. Anemia. Gastrointestinal side effects of radiation or chemotherapy. Chronic diarrhea. Duodenal ulcer. Proctitis. Cirrhosis of the Liver. Cognitive impairment. Abnormal vaginal discharge. Ulcerative enterophthisis with diarrhea. Irregular menstruation. Childhood eczema. Rhinitis. Eyelid edema. Cough. COPD. Common cold in the elderly. Myasthenia gravis. Multiple sclerosis. Polyneuritis. Guillain-Barre disease. Acute myelitis (inflammation of the spinal cord). Progressive muscular dystrophy. The sequelae of poliomyelitis. Stomach cancer. Nausea/Vomiting. Epstein-Barr virus syndrome. Chronic tonsillitis. Sore throat. Candidiasis. Gout. Weakness. Edema. Osteoporosis. Strangury. Tinnitus. Peripheral neuropathy. Pharyngitis. Sweating from the hands and feet. Cervical Polyps. Tongue pain. Neurasthenia. Atrophy (Wei) Syndrome. Proteinuria. Pulmonary tuberculosis. Asthma. Emphysema. Chronic enteritis. Anorexia during convalescence. Infantile diarrhea. Severe fatigue during convalescence. Intestinal tuberculosis. Gastroptosis. Uterine bleeding. Hypothyroidism. Irritable bowel syndrome. Dyspepsia. Chronic colitis. Nephritis. Compromised immune system. Rhinitis. Obesity. Chronic pancreatitis with diarrhea. Chronic pharyngitis. Acne. Keratomalacia. Hordeolum. Optic atrophy. Acute infectious multiple neuritis. Progressive myodystrophy. Progressive myodystrophia. Hysterical paralysis. Periodic paralysis. Facial paralysis. AIDS/HIV. Myalgic encephalomyelitis. Chronic fatigue syndrome. Post-glandular fever. Immune deficiency. Abdominal fullness and distention. Chronic sinusitis. Amenorrhea. Fatigue. Premenstrual tension. Indigestion. Dyspnea. Deafness. Polymyositis/Dermatomyositis. Constipation. Cervicitis. Ulcerative colitis.

* SHEN TONG ZHU YU TANG - 身痛逐瘀湯 - Cnidium and Notopterygium Combination. Drive Out Blood Stasis from a Painful Body Decoction

FORMULA ACTIONS - Invigorates the circulation of Qi and Blood Removes Blood Stagnation in the channels and collaterals. Unblocks painful obstruction. Alleviates pain. Relieves arthralgia.

SYNDROMES - Painful obstruction due to Qi and Blood Stagnation

CLINICAL MANIFESTATIONS - Muscle ache of the neck, back, legs and shoulder. Whole body pain. Shoulder pain. Elbow pain. Pain at the waist. Arm pain. Low back pain. Leg pain. Sciatica.

HERBS AND ACTIONS

-Qin Jiao - Dispels Wind-Dampness and relaxes the sinews.

-Chuan Xiong - Invigorates the Blood and promotes the movement of Qi, expels Wind and alleviates pain. With Dang Gui, for pain, numbness and paralysis from Wind-Dampness and Stagnant Qi blocking the Blood channels preventing nourishment from reaching the sinews.

-Tao Ren - Breaks up Blood Stasis and invigorates Blood circulation. With Dang Gui and Hong Hua for pain associated with Blood Stasis. With Hong Hua, invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea with abdominal pain, clotting and scanty flow, swollen painful sores, chest pain due to Blood Stasis and Rheumatoid arthritis.

-Hong Hua - Invigorates Blood, dispels Blood Stasis and alleviates pain. With Tao Ren, Invigorates the Blood for all types of Blood Stagnation such as dysmenorrhea, amenorrhea, swollen painful sores and chest and abdominal pain. With Tao Ren and Dang Gui, for pain associated with Blood Stasis. With Chuan Xiong, for chest and abdominal pain due to Qi and Blood Stasis.

-Gan Cao - Moderates spasms, alleviates pain and harmonizes.

-Qiang Huo - Expels Wind-Cold-Dampness, unblocks painful obstruction, alleviates pain and guides Qi to the Tai Yang and Du channels. With Chuan Xiong, for headache and generalized body aches and pains associated with the common cold or painful obstruction.

-Mo Yao - Invigorates Blood, dispels Stagnation, reduces swelling and alleviates pain. With Hong Hua, for chest and abdominal pain, amenorrhea and dysmenorrhea due to Blood Stasis.

-Dang Gui - Invigorates and harmonizes the Blood, disperses Cold and stops pain due to Blood Stasis. With Chuan Xiong for pain , numbness and paralysis from Wind-Dampness and Stagnant Qi blocking the Blood channels preventing nourishment from reaching the sinews. With Tao Ren and Hong Hua for pain associated with Blood

Stasis. With Gan Cao, moderates spasms and relieves abdominal pain.

-Wu Ling Zhi - Invigorates the Blood, disperses Blood Stasis and alleviates pain. With Xiang Fu for epigastric pain.

-Xiang Fu - Spreads and regulates Liver Qi and alleviates pain. With Wu Ling Zhi for epigastric pain. With Chuan Xiong, for Qi Stagnation combined with Blood Stasis.

-Chuan Niu Xi - Expels Wind, invigorates the channels and Blood for pain due to Wind-Dampness.

-Di Long - Drains Heat and stops spasms and convulsions and unblocks and promotes movement in the channels and collaterals.

CONTRAINDICATIONS - Contraindicated during pregnancy.

NOTES - This formula works on the entire body. This formula is often successful when other Bi syndrome formulas have failed.

TREATS - Muscle ache of the whole body. Arthralgia. Rheumatoid arthritis. Lumbago. Arthritis. Carpal tunnel syndrome. Lateral epicondylitis. Epitrochleitis. Scapulohumeral periarthritis. Middle back pain. Whole body pain. Sciatica. Leg pain. Neuralgia. Hyperosteogeny. Allergic purpura. Elbow pain. Tennis elbow. Osteoporosis. Peripheral neuropathy. Neck pain. Hip pain.

* SHENG MAI YIN WAN - 生脉饮片 - Replenish Pulse Pills

FORMULA ACTIONS - Replenishes Qi and Yin Generates Body Fluids

SYNDROMES - Lung Qi and Yin Deficiency

CLINICAL MANIFESTATIONS - Chronic cough or Dry cough. Insomnia. Night sweats. Spontaneous perspiration. Weakness. Palpitations. Shortness of breath. Fever. Irritability.

HERBS AND ACTIONS

-Ren Shen - Tonifies Yuan, Spleen, Stomach, Lung and Heart Qi, generates Body Fluids and stops thirst. With Mai Men Dong and Wu Wei Zi, for Qi and Yin Deficiency with shortness of breath and spontaneous sweating usually secondary to injury from Heat.

-Mai Men Dong - Moistens the Lungs, nourishes Yin, stops cough, nourishes Stomach Yin, generates fluids clears the Heart and eliminates irritability.

-Wu Wei Zi - Astringes leakage of Lung Qi, stops cough, astringes sweat, generates fluids, tonifies the Kidneys, astringes Jing, stops diarrhea and spermatorrhea, quiets the Spirit and calms and contains Heart Qi. With Mai Men Dong, for exhaustion of Qi and Yin with shortness of breath, cough, and thirst and spontaneous night sweats with Qi Deficiency.

-Dan Shen - Invigorates the Blood, dispels Blood Stasis, clears Heat, soothes irritability, nourishes the Blood and calms the Spirit.

CONTRAINDICATIONS - Use with extreme caution in cases with high fever. Use with extreme caution when External pathogenic factors have not been eliminated.

TREATS - Chronic fatigue syndrome. Acute collapse. Pulmonary tuberculosis. Myocarditis. Rectal prolapse. Stomatitis. Chronic gastritis. Diabetes. Spontaneous perspiration. Night sweats. Obstinate insomnia. Hashimoto's thyroiditis. Weakness. Palpitations. Coronary artery disease. Heat stroke. Impotence. Arrhythmia. Neurosis. Acute infectious hepatitis. Bronchial asthma. Cor pulmonare. Acute inferior myocardial infraction. Toxic shock. Congestive Heart-failure. Insomnia. Fatigue. Dyspnea.

* SUAN ZAO REN TANG - 酸棗仁湯 - Sour Jujube Decoction. Zizyphus Combination Decoction of Wild Jujube Seed

FORMULA ACTIONS - Nourishes Liver Blood Nourishes the Heart Calms the Shen Clears Heat in Liver and Heart Eliminates irritability

SYNDROMES - Heart Blood Deficiency. Heart and Liver Blood Deficiency. Liver Yin Deficiency with Empty Fire. Disturbing Heart Liver Blood Deficiency with Deficiency Heat Rising

CLINICAL MANIFESTATIONS - Irritability. Anxiety. Palpitations. Night sweats. Dizziness. Vertigo. Dry throat and mouth no thirst. Fidgeting. Insomnia. Insomnia due to stress. Excessive dreams. Lack of energy. Weakness and fatigue. Weak abdomen. Restlessness. Sleepiness. Light-headedness. Impatience.

HERBS AND ACTIONS

-Suan Zao Ren - Calms the Shen and nourishes the Heart and Liver. With Fu Ling and Zhi Mu, for insomnia and irritability due to Liver Yin Deficiency.

-Fu Ling - Quiets the Heart, calms the Shen and tonifies the Spleen and Stomach.

-Zhi Mu - Enriches the Yin, clears Heat and moistens Internal Dryness modifying the properties of Chuan Xiong.

-Chuan Xiong - Regulates the Liver Qi and invigorates the Blood.

-Gan Cao - Tonifies the Spleen and moderates and harmonizes the properties of the other herbs.

TREATS - Insomnia. Nervousness. Neurasthenia. Forgetfulness. Anemia. Nervous exhaustion. Somnolence. Excessive worrying. Dizziness. AIDS/HIV. Hyperthyroidism. Anxiety neurosis. Impotence. Stress. Palpitations. Fatigue. Congestive Heart failure. Night sweats. Dry skin. Nightmares. Cardiac neurosis. Paroxysmal tachycardia. Menopause syndrome. Schizophrenia with irritability and insomnia. Nocturnal emissions. Spermatorrhea. Menopause syndrome. Anxiety. Vertigo. Fever. Low-grade fever. Panic attacks. Neurosis. Chronic hepatitis. Hypertension. Weakness. Hysteria. Red eyes.

NOTES - This formula is especially effective for insomnia due to Deficiency, irritability or consumption.

* TIAN MA GOU TENG YIN - 天麻芶藤飲 - Gastrodia and Uncaria Decoction

FORMULA ACTIONS - Calms the Liver Extinguishes Wind Clears Heat Invigorates the Blood Tonifies the Liver and Kidneys

SYNDROMES - Liver Wind Stirring Internally: Liver Yang (Liver Fire) Generates Wind Liver Yin Deficiency with Liver Yang Rising

CLINICAL MANIFESTATIONS - Headache. Dizziness. Vertigo. Tinnitus. Blurred vision. Sensation of Heat rushing to the head. Insomnia. Dream disturbed sleep. Numbness. Twitching and spasms in the extremities. Hemiplegia. Paralysis. Convulsions. Trembling tongue. Deviation of mouth and eyes. Coma.

HERBS AND ACTIONS

-Tian Ma - Extinguishes Wind, calms the Liver, stops spasms and tremors and subdues rising Liver Yang. With Gou Teng and Shi Jue Ming, calms the Liver and extinguishes Wind.

-Gou Teng - Extinguishes Wind, stops spasms, drains Liver Heat and pacifies Liver Yang. With Tian Ma, calms the Liver and extinguishes Wind.

-Xia Ku Cao - Clears Liver Fire and brightens the eyes. Clears Hot Phlegm and dissipates nodules. Treats hypertension. (substitutes Shi Jue Ming)

-Zhi Zi - Clears Heat and cools and activates Blood. With Huang Qin, clears Heat and drains Fire preventing Heat from rising through the Liver channel.

-Huang Qin - Drains Fire and calms ascending Liver Yang. With Zhi Zi, powerfully clears

and drains lurking Heat from the Lungs with fever, fullness in the chest, cough with yellow sputum and epistaxis or hematemesis.

-Yi Mu Cao - Invigorates the Blood preventing Blood from rising to the head with rising Liver Yang.

-Chuan Niu Xi - Invigorates and descends Blood and expels Wind. With Du Zhong and Sang Ji Sheng, tonifies and nourishes the Liver and Kidneys.

-Du Zhong -Tonifies the Kidneys and Liver, aids the smooth flow of Qi and Blood and lowers Blood pressure.

-Sang Ji Sheng - Nourishes Liver and Kidney Yin, nourishes Blood and treats hypertension.

-Yuan Zhi - Calms the Spirit, sedates the Heart and clears the channel joining the Heart and Kidney. Expels Phlegm, opens the Orifices, clears the Lungs and stops coughing. Reduces abscesses and dissipates swellings. (substitutes Ye Jiao Teng)

-Fu Shen - Pacifies the Heart, calms the Shen and soothes the nerves.

TREATS - Cerebrovascular disease. Dizziness. Essential hypertension. Renal hypertension. Hypertensive encephalopathy. Aphasia. Apraxia. Headache. Eyelid twitch. Vertigo. Cerebral hemorrhage. Stroke. Ischemic stroke. Neurasthenia. Paresthesia. Parkinson's disease. Alzheimer's disease. Stress. Puerperal fever. Palpitations. Facial paralysis. Otorrhea. Dysmenorrhea. Eye pain. Red eyes. Epilepsy. Neurosis. Puerperal eclampsia. Hemiplegia. Trigeminal neuralgia. Apoplexy. Migraine. Insomnia. Alopecia. Meniere’s disease. Cerebral embolism. Cerebral infarction. Facial spasms. Transitory ischemic attacks. Numbness. AIDS/HIV. Tinnitus. Otitis media. Menopause syndrome. Paralysis. Multiple sclerosis. Neck pain and stiffness. Coronary Heart disease. Ear pain.

CONTRAINDICATIONS - Contraindicated for those with Liver Wind due to Yin Deficiency.

* TIAN WANG BU XIN DAN - 天王補心丹 - Emperor of Heaven's Special Pill to Tonify the Heart.Ginseng and Zizyphus Formula. Emperor's Tea. The King's Mind Easing Tonic Pills. Celestial Emperor’s Heart Supplementing Elixir. The Heavenly King's Tonic Pills

FORMULA ACTIONS - Enriches the Yin Nourishes the Blood. Tonifies the Heart and Kidneys. Calms the Shen. Clears Heat

SYNDROMES - Heart Yin Xu. Heart and Kidney Yin Xu (with Fire Flaring). Heart and Kidney Yin Xu with Heart Blood Xu

CLINICAL MANIFESTATIONS - Irritability. Palpitations. Anxiety. Fatigue. Insomnia. Very restless sleep. Inability to think or concentrate even for short periods. Nocturnal emissions. Forgetfulness. Dry stools. Mouth sores. Tongue sores. Low grade afternoon fever. Dream disturbed sleep. Night sweats. Constipation.

HERBS AND ACTIONS

-Sheng Di Huang - Cools Heart Fire, clears Heat, cools the Blood and enriches Yin and Blood. With Xuan Shen, for dry throat, irritability, a red tongue and a thready rapid pulse due to Yin Xu with Fire Flaring.

-Ren Shen - Tonifies Heart Qi and calms the Shen. With Fu Ling, assists Heart Qi. With Mai Men Dong and Wu Wei Zi, for Qi and Yin Xu.

-Tian Men Dong - Enriches the Yin and generates Fluids. With Mai Men Dong, for Yin Xu with injured Fluids. With Mai Men Dong and Xuan Shen, clears Xu Heat and nourishes Yin.

-Mai Men Dong - Enriches the Yin and clears the Heart. With Ren Shen and Wu Wei Zi, for exhaustion, increased Heart rate, profuse perspiration and wheezing due to severe Heart and Lung Xu.

-Xuan Shen - Enriches Yin and clears Heat.

-Dan Shen - Invigorates, cools and nourishes the Blood and clears Heat. With Dang Gui, nourishes Blood to nourish the Heart without causing Stasis. With Suan Zao Ren and Bai Zi Ren, for Heart Blood Xu with palpitations and insomnia.

-Fu Ling - Strengthens the Spleen and pacifies the Heart. With Suan Zao Ren, Wu Wei Zi and Yuan Zhi, for palpitations and insomnia.

-Yuan Zhi - Calms the Shen, sedates the Heart and opens the channel between the Heart and Kidneys. With Bai Zi Ren, calms the Shen.

-Dang Gui - Nourishes and invigorates Blood.

-Wu Wei Zi - Tonifies Qi, tonifies Kidney Jing, nourishes the Heart, calms the Shen, generates Fluids and astringes excessive perspiration. With Suan Zao Ren, astringes Heart Qi. With Suan Zao Ren and Sheng Di Huang, for Heart Qi Xu with insomnia, irritability and forgetfulness.

-Bai Zi Ren - Nourishes the Heart and Kidneys, calms the Shen and astringes Yin Xu perspiration. With Yuan Zhi and Suan Zao Ren, for insomnia, and palpitations due to Heart Blood Xu.

-Suan Zao Ren - Nourishes Heart Yin, augments Liver Blood, calms the Shen and astringes sweat. With Wu Wei Zi, prevents leakage of Heart Qi.

-Jie Geng - Directs actions of the formula upwards.

-Zhu Sha - Sedates the Heart and anchors and calms the Shen. With Suan Zao Ren, Bai Zi Ren and Dang Gui, for insomnia or palpitations with anxiety due to Blood Xu.

TREATS - Coronary Heart disease. Menopause syndrome. Chronic urticaria. Aphthous ulcers. Neurasthenia. Insomnia. Hypertension. Hyperthyroidism. Goiter. Amenorrhea. Angina pectoris. Impotence. Dizziness. AIDS/HIV. Numbness. Parkinson's disease. Drug abuse. Senility. Constipation. Obsessive-compulsive disorder. Post-traumatic stress disorder (PTSD). Shock. Hysteria. Neurosis. Forgetfulness. Fatigue. Night sweats. Nocturnal emissions. Post-menopausal uterine bleeding. Palpitations. Hyperparathyroidism. Mental disturbances. Anemia. Congestion. Stomatitis. Emotional instability. Ephidrosis. Sinus tachycardia. Anxiety. Infertility. Viral myocarditis. Attention deficit disorder. Hepatitis. Hematuria. Thromboangitis obliterans. Paresthesia. Tremors. Bi-polar disorder. Low-grade fever. Anxiety neurosis. Involutional psychosis. Panic attacks. Low back pain. Weakness. Congestive Heart failure. Spermatorrhea. Dermatitis. Insomnia associated with AIDS/HIV.

CONTRAINDICATIONS - Contraindicated for those with Spleen and Stomach weakness with loose stools. Contraindicated for those with Phlegm-Damp Stagnation. Do not take long term. While taking this formula, avoid cilantro, garlic, radishes seafood and liquor.

NOTES - Recommended for people who do a lot of reading. Good for people who have taken tranquilizers and sleeping pills for a long time and they have lost their effect.

1.3.3.54 RT-TCM-54

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_54

Dai Zong Fang, Esophageal Stricture-TCM, Jian Pi Wan, Kang Ning Wan, Ling Jiao Gou Teng Tang, Mai Men Dong Tang, Qi Bai Gao, Qing Fei Yi Huo Hua Tan Wan, Yi Qi Yang Yin Huo Xue Fang

* DAI ZONG FANG - A Natural Approach to Gut-Liver Health & Metabolic Balance

Formula Composition
DZF combines six potent herbs with synergistic effects:
-Huang Lian - Clears heat, reduces inflammation, modulates gut bacteria.

-Zhi Shi - Moves stagnation, aids digestion.
-Ban Xia - Resolves phlegm-dampness, supports gut barrier.
-Gua Lou - Clears heat-phlegm, lubricates intestines.
-Rou Gui - Warms digestion, balances cold-heat mismatch.
-Hong Qu - Regulates lipids, supports circulation.

DZF targets the gut-liver axis to improve metabolic health:
Repairs Gut Health
- Restores beneficial microbes (Lactobacillus, Bifidobacterium).
- Strengthens the intestinal barrier (prevents "leaky gut").
- Reduces endotoxins (LPS) that drive inflammation.
Boosts Liver Function
- Reduces fat accumulation (steatosis) by blocking lipogenesis.
- Enhances fat breakdown (fatty acid oxidation).
- Improves insulin sensitivity.
Dual-Action Lipid Control
- Blocks intestinal fat absorption (Huang Lian + Hong Qu).
- Optimizes cholesterol metabolism (similar to statins, but natural).

DZF may help those with:
- Fatty liver (NAFLD/NASH)
- Type 2 diabetes or prediabetes
- High cholesterol/triglycerides
- Bloating, indigestion, or heat-damp patterns (e.g., bitter taste, sticky stools)
- Metabolic syndrome (obesity + insulin resistance)

Traditional vs. Modern Use
- TCM Perspective: Balances Spleen-Stomach Damp-Heat and Liver Qi Stagnation.
- Modern Research: Validated in db/db mice for gut microbiota modulation and metabolic benefits.

Safety & Considerations
- Contraindications: Not for cold-deficient syndromes (e.g., chronic diarrhea with cold limbs).
- Herb-Drug Interactions:
  - Hong Qu may enhance statins (monitor for muscle pain).
  - Huang Lian may lower blood sugar (caution with antidiabetics).

Notes
- Multi-target therapy: Addresses root causes (gut dysbiosis + liver dysfunction).
- Natural alternative: Fewer side effects than synthetic lipid-lowering drugs.
- Holistic benefits: Improves digestion, energy, and metabolic markers.

* ESOPHAGEAL STRICTURE-TCM

Esophageal Stricture can be addressed with Traditional Chinese Medicine (TCM) by focusing on Regulating Qi, Resolving Phlegm, Promoting blood circulation, and Moistening dryness.

This formula Harmonizes Stomach Qi, lubricates the esophagus, and reduces constriction while being gentle enough for seniors.

Modified Xuanfu Daizhe Tang (旋覆代赭汤) + Additional Herbs

FORMULA ACTIONS - Promotes downward Qi movement, resolves phlegm, and lubricates dryness

HERBAL COMPOSITION

-Xuanfu Hua - Descends rebellious Qi, resolves phlegm in the chest.
-Daizhe Shi - Anchors Qi downward, relieves reflux and constriction.
-Ban Xia - Resolves phlegm, harmonizes stomach, opens obstruction.
-Sheng Jiang - Warms the middle Jiao, aids digestion, stops nausea.
-Dang Shen - Tonifies Qi (for seniors with deficiency).
-Gua Lou - Lubricates dryness, clears phlegm-heat in the esophagus.
-Yu Jin - Moves Qi and blood, relieves chest tightness.
-Mai Dong - Moistens esophageal dryness, nourishes Yin.
-Bai Shao - Relaxes spasms, soothes esophageal tension.
-Gan Cao - Harmonizes the formula, protects mucous membranes.

Modifications

-Gan Jiang - For Cold Phlegm (white tongue coating, aversion to cold)
-Huang Lian - For Heat (red tongue, burning sensation)
-San Leng - For Severe Blood Stasis (purple tongue, stabbing pain)
-Shi Hu - For Severe Dryness (scanty saliva, dry throat)

PRECAUTIONS

- Daizhe Shi (Hematite) is contraindicated in severe Spleen Qi Deficiency with chronic diarrhea.
- If stricture is due to tumors or severe scarring, TCM should complement (not replace) conventional treatments.

* JIAN PI WAN - 健脾片 - Strengthen the Spleen Pill. Ginseng Stomachic Pills

FORMULA ACTIONS - Strengthens the Spleen. Harmonizes the Stomach. Reduces Food Stagnation. Stops diarrhea

SYNDROMES - Spleen and Stomach Qi Deficiency with Food Stagnation

CLINICAL MANIFESTATIONS - Reduced appetite. Difficulty digesting. Abdominal and epigastric bloating. Watery diarrhea. Loose stools.

HERBS AND ACTIONS

-Bai Zhu - Tonifies the Spleen, augments Qi and dries Dampness. With Sha Ren and Ren Shen, for Spleen and Stomach Deficiency. With Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao. With Bai Zhu, strengthens the Spleen and resolves Dampness. With Ren Shen and Bai Zhu, for weak and deficient Spleen with fatigue, anorexia and loose stools. With Mu Xiang, for diarrhea and borborygmus due to Dampness.

-Ren Shen - Tonifies Spleen and Stomach Qi. With Bai Zhu, tonifies the transformation and transportation functions of the Spleen. With Bai Zhu, Fu Ling and Gan Cao, for Spleen and Stomach Qi Deficiency with Dampness with anorexia, diarrhea, vomiting, abdominal distention and fatigue.

-Shan Yao - Tonifies the Spleen, nourishes Stomach Yin and stops diarrhea. With Bai Zhu and Fu Ling, for Spleen Deficiency with loose watery stools. With Dang Shen, for Spleen and Kidney Deficiency with fatigue, weakness, anorexia, and watery stools. With Ren Shen and Bai Zhu, for decreased appetite and lack of energy due to Spleen Deficiency.

-Dou Kou - Astringes the Intestines, stops diarrhea, warms the Middle Jiao, regulates Qi and alleviates pain. With Mu Xiang, for poor appetite, diarrhea, and Cold abdominal pain due to Spleen and Stomach Deficiency Cold leading to constrained Middle Jiao Cold. With Sha Ren and Shan Zha, for loss of appetite and poor digestion.

-Shan Zha - Reduces and guides out Food Stagnation, transforms accumulations and stops diarrhea. With Shen Qu, for general indigestion and Food Stagnation.

-Shen Qu - Reduces Food Stagnation, moves Qi,promotes digestion and harmonizes the Stomach. With Bai Zhu and Dang Shen, for Food Stagnation and diarrhea due to Spleen Deficiency. With Mu Xiang and She Ren, for abdominal pain associated with Food Stagnation. With Mai Ya and Shan Zha, for abdominal distention, belching, diarrhea and anorexia due to Food Stagnation; indigestion and childhood nutritional impairment due to improper breast feeding.

-Mai Ya - Reduces Food Stagnation, improves digestion and strengthens the Stomach. With Shen Qu, dry-fried for indigestion due to Food Stagnation.

-Mu Xiang - Promotes the movement of Qi, adjusts and regulates stagnant Qi in the

Intestines, strengthens the Spleen, prevents Stagnation and alleviates pain. With Bai Zhu, for anorexia with epigastric and abdominal pain and distention. With Huang Lian, for dysentery and diarrhea, especially when accompanied by tenesmus and abdominal distention and discomfort. With Sha Ren, Ren Shen and Bai Zhu, for anorexia and abdominal distention and fullness which improves with warmth applied locally.

-Chen Pi - Regulates Qi, adjusts the Middle, relieves the diaphragm, dries Dampness and transforms Phlegm. With Bai Zhu, for anorexia and other symptoms of Damp Obstruction due to Spleen Deficiency. With Dang Shen, Bai Zhu, Shen Qu, Mai Yan Shan Zha and Gan Cao, for indigestion.

-Sha Ren - Promotes the movement of Qi, aromatically transforms Dampness, strengthens the Spleen, stops vomiting, warms the Middle and stops diarrhea. With Mu Xiang, increases the flow of Qi in the digestive system while reducing distention and Food Stagnation, alleviating pain and strengthening the Spleen. With Bai Zhu and Dang Shen, for abdominal pain and diarrhea due to Dampness Obstructing the Spleen and Stomach and morning sickness. With Chen Pi, for Dampness obstructing the Spleen's transforming and transporting functions with reduced intake of food and diarrhea; belching, nausea, and a stifling sensation in the epigastrium due to Disharmony of the Stomach Qi and vomiting of unadulterated, or scanty but viscous fluids.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity. With Mu Xiang, for dysenteric disorders due to Damp-Heat Obstructing the Intestines. With Mu Xiang and Bing Lang, for hot dysenteric disorders with Qi Stagnation and Damp-Heat in the Middle Jiao with intense tenesmus.

-Gan Cao - Tonifies the Spleen, augments Qi, moderates and harmonizes the harsh properties of other herbs and guides the herbs to all twelve channels. With Dang Shen, for anorexia, fatigue and loose stools due to Spleen Deficiency. With Ren Shen, Fu Ling and Bai Zhu, strengthens the Spleen and augments Qi.

TREATS - Chronic gastritis. Chronic colitis. Chronic enteritis. Chronic pancreatitis. Diarrhea. Fetal restlessness. Indigestion. Celiac disease, Duodenal ulcer. Cirrhosis of the Liver. Poor appetite.

CONTRAINDICATIONS - Contraindicated in acute cases of Food Stagnation from contaminated food or over consumption.

* KANG NING WAN (抗宁丸 or 康宁丸)

Kang Ning Wan is a traditional Chinese herbal formula primarily used for digestive disorders, colds, flu, and mild respiratory issues. It is known for its antibacterial, antiviral, and digestive-regulating effects, making it a popular remedy for stomachaches, food stagnation, and early-stage respiratory infections.

KEY FUNCTIONS & USES

Relieves Digestive Issues - Bloating, indigestion, diarrhea, or stomachache caused by food stagnation or mild infections.
Helps regulate spleen and stomach Qi - Fights Mild Infections (Cold & Flu)
Used for early-stage colds, sore throat, or mild fever - Contains herbs with antiviral and anti-inflammatory properties.
Harmonizes Stomach & Intestines - Useful for traveler's diarrhea, food poisoning, or gastrointestinal discomfort.

COMMON INGREDIENTS. (Exact composition may vary by brand; classic versions include:)

-Huang Lian - Antibacterial, clears heat
-Mu Xiang - Regulates Qi, relieves pain
-Bing Pian - Anti-inflammatory, cooling
-Chen Pi - Aids digestion
-Hou Po - Relieves bloating
-Ban Xia - Resolves phlegm, stops vomiting

PRECAUTIONS & SIDE EFFECTS

- Not for long-term use (only for acute symptoms).
- Avoid during pregnancy unless prescribed by a TCM doctor.
- May interact with antibiotics or blood thinners.

* LING JIAO GOU TENG TANG - 羚角芶藤湯 - Antelope Horn and Uncaria Decoction. Ling Yang Gou Teng Tang .

FORMULA ACTIONS - Cools the Liver. Extinguishes Wind. Increases Fluids. Relaxes the sinews. Stops convulsions

SYNDROMES
- Phlegm Obstructs the Heart Orifice-Tense Type (Yang Obstruction).
- Liver Wind Stirring Internally: Extreme Heat Generates Wind.
- Wen Bing Xue Level Heat (Xue Fen) Generating Wind
- Phlegm-Heat.

CLINICAL MANIFESTATIONS - Persistent high fever Irritability. Restlessness. Dizziness. Vertigo. Twitching. Spasms of the extremities. Insomnia. Tinnitus. Bitter taste in the mouth. Deafness. Dry throat. Stiff neck with convulsions. Severe headache. Loss of consciousness. Maybe opisthotonos. Maybe expectoration of thick, yellow sputum.

HERBS AND ACTIONS

-Zhen Zhu - Calms the Liver, anchors the Yang and drains Liver Fire.

-Gou Teng - Balances the liver and Pericardium, calms Wind and extinguishes Fire.

-Sang Ye - Clears the Liver and eyes. With Ju Hua, clears Heat and dispels Wind from the Lungs and Liver and strengthens the formula's Wind-extinguishing functions.

-Ju Hua - Calms the Liver and extinguishes Wind. With Gou Teng, Sheng Di Huang and Bai Shao, for headaches due to Liver Wind with Yin Deficiency Fire.

-Bai Shao - Calms Liver Yang and astringes Yin. With Sheng Di Huang, nourishes Yin and generates Fluids to soften the Liver and relax sinews. With Gou Teng and Ju Hua, for headache and dizziness due to Liver Yang Rising. With Gan Cao, for abdominal pain due to disharmony between the Liver and Stomach and epigastric, hypochondriac or flank pain.

-Sheng Di Huang - Clears Heat, cools the Blood, nourishes the Yin and Blood, cools Heart Fire and increases Fluids. With Bai Shao, for Blood Deficiency Heat.

-Chuan Bei Mu - Clears Heat and transforms Phlegm. With Zhu Ru, clears Heat and transforms Phlegm.

-Fu Shen - Transforms Phlegm, pacifies the Heart, calms the Shen and treats irritability and restlessness caused by Heat attacking the Shen.

-Zhu Ru - Clears Heat and transforms Hot Phlegm.

-Gan Cao - Resolves Phlegm, clears Heat, detoxifies and harmonizes. With Bai Shao, strengthens Yin, relaxes sinews and moderates painful spasms

TREATS - Essential hypertension. Hypertensive encephalopathy. Cerebrovascular accident. Encephalitis B. Meningitis. Pneumonia. Stroke. Aphasia. Glaucoma. Catarrhal otitis media. Headache. Dizziness. Kidney failure. Fever. Tinnitus. Bad breath. Facial paralysis. Post-concussion syndrome. Lupus erythematosus. Eclampsia. Convulsions. Mania with convulsions. Chromaffinoma. Dysentery. Shingles. Post-stroke sequelae. Meniere's disease. Insomnia. Vertigo. Ebola. Constipation. Deafness. Epistaxis. Hemiplegia. Liver cancer. Seizures and epilepsy during pregnancy. Stiff neck.

CONTRAINDICATIONS - Contraindicated for those with Wind due to Deficiency.

* MAI MEN DONG TANG - 麥門冬湯 - Ophiopogonis Decoction. Decoction of Ophiopogonis Root

FORMULA ACTIONS - Benefits the Stomach. Generates Fluids. Descends Qi. Harmonizes the Middle Jiao

SYNDROMES - Stomach Fire Blazing Stomach and Lung Yin Deficiency Lung Wei Syndrome (atrophy)

CLINICAL MANIFESTATIONS - Cough with little yellow sputum. Spitting saliva. Wheezing. Shortness of breath. Dry, uncomfortable sensation in throat. Hiccups. Dry mouth. Coughing up difficult-to-extectorate Phlegm. Nausea. Scanty urination. Hoarseness. Thirst. Asthma. Flushed face. Five Sole Heat. Vomiting.

HERBS AND ACTIONS

-Mai Dong - Nourishes Lung and Stomach Yin, clears Deficiency Heat from the Stomach, generates Fluid in the Stomach and Lungs and moistens the Intestines. With Zhi Ban Xia, Geng Mi and Gan Cao, for Stomach Yin Deficiency with hiccups and vomiting.

-Ren Shen - Revives Qi and Yin and generates Fluids. With Mai Dong, strongly tonifies Qi and nourishes Lung and Stomach Yin.

-Jing Mi - Tonifies Qi and generates Fluids. With Gan Cao and Da Zao, assists Stomach Qi and generates Fluids.

-Da Zao - Strengthens the Spleen, tonifies Qi, nourishes Blood and harmonizes.

-Gan Cao - Clears Heat, relieves toxins, moistens the Lungs and harmonizes.

-Ban Xia - Moves Stomach Qi, descends Qi and assists distribution of Stomach Qi to the Lungs. With Ren Shen, for vomiting due to Stomach Deficiency.

TREATS - Pertussis. Pulmonary atelectasis. Pneumonia. Chronic tracheitis. Acute and chronic pharyngitis. Chronic laryngitis. Esophageal cancer. Tuberculosis of the pharynx. Diabetes. Bronchiectasis. Reactive lymphoid hyperplasia. Morning sickness. Cough. Cough from interstitial pneumonia. Headache. Hiccups. Hyperglycemia. Fever. Bad breath. Dyspnea. Lip pain. Hoarseness. Hypertension. Arteriosclerosis. Gastritis. Atrophic gastritis. Peptic ulcer. Esophageal reflux. Acute or chronic bronchitis. Pulmonary tuberculosis. Lung cancer. Asthma. Side effects of radiation therapy. Stomach cramps. Sjogren's syndrome. Gastralgia. Oliguria. Chronic obstructive pulmonary disease. Nausea / Vomiting. Weakness. Indigestion. Radiotherapy for breast cancer.

CONTRAINDICATIONS - Use with caution for those with cough or hiccup due to Wind-Cold or Heat. Contraindicated for those with Dampness. Use with caution for those with high fever and irritability due to Exterior Heat. Contraindicated for those with Lung atrophy due to Deficiency Cold.

HERB/DRUG INTERACTIONS - This formula was found to be effective in treating

enalapril-induced cough. This formula was found to be effective in treating capsaicinl-induced cough.

* QI BAI GAO - 七白膏 - Seven Whites Paste

Qi Bai Gao is a topical paste to whiten skin, fade dark spots, and improve complexion. The "seven white herbs" work synergistically to clear heat, nourish yin, and dispel dampness -common causes of dull skin in TCM.

-Bai Zhu - Strengthens spleen, removes dampness
-Fu Líng - Brightens skin, reduces swelling
-Bai Shao - Nourishes blood, soothes irritation
-Bai Lian - Heals blemishes, antibacterial
-Bai Zhǐ - Evens skin tone, anti-pigmentation
-Bai Jiang Can - Exfoliates, promotes collagen
-Bai Jí - Moisturizes, heals scars

Added for enhanced effects.
-Zhen Zu
-Yi Yi Ren

* QING FEI YI HUO HUA TAN WAN - 清肺抑火化痰丸 - Clear the Lungs, Suppress Fire and Transform Phlegm Pill

FORMULA ACTIONS - Clears and purges Lung Heat. Transforms Phlegm. Stops cough and asthma

SYNDROMES - Lung and Stomach Heat

CLINICAL MANIFESTATIONS - Cough. Yellow Phlegm. Dry mouth. Thirst with a desire to drink. Constipation. Sore throat. Hematemesis. Hemoptysis.

HERBS AND ACTIONS

-Huang Qin - Drains Fire and detoxifies. With Zhi Zi, powerfully clears and drains lurking Heat from the Lungs with fever, fullness in the chest, coughing with yellow sputum and epistaxis or hematemesis.

-Zhi Zi - Clears Heat, reduces Fire and eliminates irritability in the San Jiao. With Da Huang, for constipation.

-Chuan Bei Mu - Clears Heat, transforms Phlegm, stops coughing and nourishes and moistens the Lungs.

-Huang Bai - Drains Fire and relieves Fire toxicity. With Zhi Zi, resolves constraint and directs Qi downward for clearing Heat and Fire from the Liver channel.

-Jie Geng - Opens the Lungs, spreads Lung Qi, expels Phlegm and benefits the throat.

-Ku Shen - Clears Heat and dries Dampness.

-Qian Hu - Expels Phlegm, descends Qi and expels Wind-Heat (most suitable when Wind-Heat constrains the Lungs).

-Tian Hua Fen - Clears and drains Lung Heat, transforms Phlegm and moistens Lung Dryness.

-Da Huang - Drains Fire, purges accumulations, invigorates the Blood, dispels Blood Stasis and eliminates Phlegm. With Huang Lian, for a feeling of fullness and distention due to Heat Accumulation.

TREATS - Cough. Bronchial asthma. Bronchitis. Bronchiectasis. Pneumonia. Emphysema. COPD. Pulmonary tuberculosis.

* YI QI YANG YIN HUO XUE FANG - 翊气阳阴活血方 - Boost Qi, Yang and Yin and Activate the Blood Formula.

FORMULA ACTIONS - Tonifies Qi and Blood. Promotes urination. Invigorates the Blood. Dispels Blood Stasis. Nourishes Yin. Generates Fluids. Clears Heat. Drains Kidney Fire. Cools the Blood

SYNDROMES - Qi, Blood and Yin Deficiency with Blood Stagnation and Heat

CLINICAL MANIFESTATIONS - Lassitude. Fatigue. Shortness of breath. Dizziness. Tinnitus. Palpitations. Emaciation. Lack of strength. Dry, rough eyes Possible distended feeling in eyes A pale, lusterless face Possible malar flush Restless Insomnia Poor memory. Dry, parched throat. Tasteless feeling in the mouth. Low back and knee soreness and weakness. Low grade fever. Five Sole heat. Possible sweating. Possible tremors of the hands and tongue. Scanty intake. Abdominal distention after meal. Loose stools.

HERBS AND ACTIONS

-Huang Qi - Tonifies Qi and Blood, promotes urination, reduces edema and generates Body Fluids.

-Dan Shen - Invigorates, nourishes and cools the Blood, dispels Blood Stasis, clears Heat and soothes irritability.

-Yu Jin - Invigorates the Blood, dispels Blood Stasis, regulates Qi flow, clears Heat and cools the Blood.

-Mai Men Dong - Nourishes Lung and Stomach Yin and generates fluids.

-Fu Ling - Promotes urination, leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao.

-Nu Zhen Zi - Nourishes and tonifies the Liver and Kidney Yin and clears Deficiency Heat.

-Yu Zhu - Nourishes Yin, moistens Dryness, moistens the Lungs, nourishes the Stomach and generate fluids.

-Huang Lian - Clears Heat, drains Dampness, drains Fire and resolves Fire toxicity.

-Mu Dan Pi - Clears Heat, cools, harmonizes and invigorates the Blood, clears Deficiency Fire and dispels Blood Stasis. With Chi Shao, for Blood Stasis disorders.

-Ze Xie - Promotes urination, leaches out Dampness and Drains Kidney Fire. With Fu Ling, facilitates the removal of water and leaches out Dampness.

-Chi Shao - Invigorates the Blood, dispels Blood Stasis,clears Heat, cools the Blood and relieves pain. With Bai Shao, for spasms and cramping pain associated with Blood Deficiency and Blood Stagnation.

-Bai Shao - Nourishes the Blood and astringes Yin.

TREATS - Hyperglycemia. Coronary Heart disease. Obesity. Primary Sjogren's syndrome. Diabetes mellitus. Abdominal fullness and distention. Low back pain. Forgetfulness. Fatigue. Dyspnea. Arteriosclerosis. Stroke. Diabetic nephropathy. Acute viral mydcarditis.
Insomnia. Tinnitus. Knee pain. Weakness. Palpitations.

1.3.3.55 RT-TCM-55

Traditional Chinese Medicine

https://archive.org/details/Resonant_Therapy-TCM_55

Arthritis-Skin Replenishment Tea, Chikungunya TCM, Collagen Replenishment TCM Herbs Molecules, Fat-metabolizing Tea Blend,
OA-Skin Dryness Tea, OA-Skin Repair Decoction, OA-Skin Support Brew, Oral Health Support - TCM, Shen Yi Bu Yuan Tang,

* ARTHRITIS-SKIN REPLENISHMENT TEA

For seniors dealing with arthritis-related skin dryness (a common issue due to Kidney / Liver Yin deficiency and Blood stasis in TCM), here's an herbal tea to nourish joints, improve skin hydration, and support collagen synthesis safely.

Herbal Tea: Arthritis-Skin Replenishment Decoction
Targets: Dry skin, joint stiffness, and poor circulation.

Ingredients
- Shu Di Huang - Nourishes Kidney / Liver Yin and Blood (moistens dryness).
- Dang Gui - Blood tonic, improves circulation to skin/joints.
- Sang Ji Sheng - Strengthens tendons, relieves joint ache.
- Bai Shao - Calms pain, softens stiff muscles.
- Yi Yi Ren - Reduces dampness (if swollen joints).
- Gou Qi Zi - Antioxidant for skin/joint repair.
- Chen Pi - Digestive weakness

* CHIKUNGUNYA TCM - 基孔肯雅热

Chikungunya is a viral disease transmitted by mosquitoes, characterized by high fever, severe joint pain, rash, and fatigue. In Traditional Chinese Medicine (TCM), it is classified as a Damp-Heat epidemic disease or Heat Toxin with Damp Obstruction".

This TCM Formula is for Chikungunya (Acute Phase - Fever & Joint Pain). A commonly used base formula is a modified Qing Hao Bie Jia Tang (青蒿鳖甲汤) combined with Si Miao San (四妙散) to clear heat, resolve dampness, and alleviate joint pain.

Modified Qing Hao Bie Jia Tang + Si Miao San

- Qing Hao - Clears heat, especially in epidemic diseases
- Bie Jia - Nourishes yin, clears deficiency heat
- Sheng Di Huang - Clears heat, cools blood
- Zhi Mu - Clears heat and dampness
- Mu Dan Pi - Cools blood, reduces inflammation
- Cang Zhu - Resolves dampness
- Huang Bai - Clears damp-heat
- Yi Yi Ren - Resolves dampness, relieves joint pain
- Niu Xi - Promotes blood circulation, directs herbs downward
- Fang Feng - Expels wind-damp, relieves pain
- Gan Cao - Harmonizes formula

Modifications
- ShiGao, Jin Yin Hua - For high fever + thirst
- Qin Jiao, Wei Ling Xian - For severe joint swelling / pain
- Huo Xiang, Pei Lan - For nausea / vomiting (damp stagnation)

* COLLAGEN REPLENISHMENT TCM

Formula designed to maximize collagen synthesis, skin barrier repair, and anti-aging effects while minimizing redundancy:

1. Collagen Synthesis & Stability
- Hydrolyzed Marine Collagen Peptides (Bioavailable Gly-Pro-Hyp)
- Ch-OSA (Silicon for collagen cross-linking)
- L-Ascorbic Acid (Vitamin C, essential for hydroxylation)
*Synergy: Collagen peptides provide building blocks; Ch-OSA stabilizes fibrils; vitamin C ensures proper maturation.

2. Barrier Repair & Ceramide Network
- Ceramide NP + EOP + AP (Full-spectrum stratum corneum repair)
- 1-O-Acyl-Ceramide (Stabilizes lipid "rivets")
- Sphingosine (Boosts endogenous ceramide production)
*Synergy: Ceramides NP/EOP/AP rebuild lamellar layers; 1-O-acyl strengthens cohesion; sphingosine amplifies synthesis.

3. Antioxidant & MMP Inhibition
- TetraHydroResveratrol (THR) (SIRT1 activator, 10x more stable than resveratrol)
- Ling Zhi (Reishi) (Triterpenes inhibit MMP-1)
- Gou Qi Zi (Lycium) (Zeaxanthin quenches ROS)
*Synergy: THR and Ling Zhi protect collagen from degradation; Gou Qi Zi neutralizes free radicals.

4. Hydration & Glycosaminoglycan Support
- Hyaluronate Decasaccharide (Low-MW HA for deep hydration)
- Bai He (Lily Bulb) (Mucilage polysaccharides)
- Shi Hu (Dendrobium) (Dendrobium polysaccharides)
*Synergy: Decasaccharide penetrates skin; Bai He/Shi Hu provide TCM-based humectancy.

5. Wound Healing & Fibroblast Activation
- GHK-Cu (Copper peptide for collagen I/III synthesis)
- Ji Xue Cao (Centella asiatica) (Asiaticoside stimulates fibroblasts)
- Zinc Picolinate (Regulates collagenase, supports healing)
*Synergy: GHK-Cu and Centella directly activate fibroblasts; zinc balances remodeling.

6. Circulation & Nutrient Delivery
- Dang Gui (Angelica sinensis) (Ferulic acid improves microcirculation)
*Role: Ensures actives reach skin via improved blood flow (supports other groups).

* FAT-METABOLIZING TEA BLEND

Is a digestive aid and metabolic supporter recipe, helps the body efficiently process the fuel you give it. This traditional-inspired tea blend combines powerful botanicals known for their supportive role in digestion and healthy metabolism. It's not a magic potion, but a synergistic blend designed to gently assist your body's natural processes.

Ingredients:

-Shan Zha - The cornerstone of this blend. Renowned in herbalism for its ability to support healthy digestion of fats, particularly by helping to maintain already healthy triglyceride levels.

-Dan Shen - Works to improve microcirculation, ensuring efficient nutrient delivery and waste removal at the cellular level, which is crucial for metabolic health.

- Chen Pi - Aids digestion by regulating Qi (energy flow), helping to soothe the stomach and reduce uncomfortable bloating after meals.

- Lv Cha - Adds a metabolic boost with its high concentration of EGCG, a potent antioxidant clinically shown to promote the oxidation (burning) of fat for energy.

* OA-SKIN DRYNESS TEA

A friendly easygoing approach for osteoarthritis (OA) with skin dryness, Gou Qi Zi + Da Zao Tea.

- Gou Qi Zi - Antioxidant for skin/joint repair.
- Da Zao - Augments Qi and moistens internal Dryness. It also clears Heat.

* OA SKIN REPAIR DECOCTION

For osteoarthritis (OA) with skin dryness, TCM focuses on nourishing Kidney / Liver Yin, moving Blood stagnation, and moistening dryness while reducing joint inflammation. Below is a herbal combination.

Internal Herbal Formula: "OA-Skin Repair Decoction"
Targets: Joint degeneration, stiffness, dry/itchy skin.

Ingredients
- Shu Di Huang - Tonifies Kidney/Liver Yin (roots of OA in TCM).
- Dang Gui - Moves Blood, relieves joint pain, hydrates skin.
- Du Zhong - Strengthens tendons/bones (TCM "bone tonic").
- Ji Xue Teng - Invigorates Blood, improves joint circulation.
- Bai Shao - Relaxes muscles, reduces spasms.
- Gou Qi Zi - Antioxidant for skin/joint repair.
- Mu Dan Pi - Cools blood (red/swollen joints) with heat signs.
- Rou Gui - Warms joints aflicted with cold pain.
- Shen Qu - Helps weak digestion.

* OA-SKIN SUPPORT BREW

Simplified, daily-friendly version of the protocol for osteoarthritis (OA) and skin dryness, designed for seniors who need an easy yet effective routine.

Daily Herbal Tea: "OA-Skin Support Brew"

Features
- Light enough for daily use but still targets OA and dryness.
- No heavy herbs (e.g., Shu Di Huang) to burden digestion.

Ingredients
-Gou Qi Zi - Antioxidant for joints/skin.
-Dang Gui - Blood nourishment.
-Sang Ji Sheng - Gentle joint strengthener.
-Bai Shao - Relieves stiffness.
-Long Yan Rou - Mild Blood tonic (adds sweetness).

* ORAL HEALTH SUPPORT-TCM

- Huang Lian - Contains berberine, which fights oral bacteria like Streptococcus mutans (a major cause of cavities). Often used in mouth rinses.

- Huang Bai - Another berberine-rich herb that reduces oral infections.

- Jin Yin Hua - Has antimicrobial effects; used for gum inflammation.

- Gan Cao - Anti-inflammatory and may inhibit cavity-causing bacteria.

- Mo Yao - Used in TCM for gum diseases and toothaches.

- Ding Xiang - A natural analgesic and antiseptic for tooth pain (often applied as oil).

* SHEN YI BU YUAN TANG - 肾益补元汤 - Kidney-Boosting and Primordial Qi-Restoring Decoction

This formulation is primarily used in senior health to address Kidney and Liver deficiencies, Aging-related decline, and associated syndromes.

FORMULA OVERVIEW
- Core Kidney Tonics - Shu Di Huang, He Shou Wu, Shan Zhu Yu, Gou Qi Zi, Ba Ji Tian.
- Yang Support - Rou Gui, Fu Zi.
- Qi & Digestion - Ren Shen, Shan Yao, Chen Pi.
- Yin/Heat Balance - Mai Dong, Mu Dan Pi.
- Dampness Regulation - Fu Ling, Ze Xie.

FORMULA ACTIONS
Tonifies Kidney Yin & Yang. Strengthens Spleen & Qi. Astringes Essence & Stops Leakage. Clears Deficiency Heat & Dampness. Enhances Vitality & Longevity

SYNDROMES & CLINICAL MANIFESTATIONS
- Kidney Yin & Yang Deficiency - Fatigue, weak lower back/knees, tinnitus, nocturia, cold limbs, low libido.
- Liver Blood & Essence Deficiency - Dizziness, blurred vision, premature graying, dry eyes.
- Spleen Qi Weakness - Poor appetite, loose stools, weak digestion.
- Senile Decline - Memory loss, slow recovery, frailty.
- Mild Damp-Heat or Deficiency Heat - Night sweats, low-grade fever, scanty dark urine.

HERB ACTIONS
- Shu Di Huang - Nourishes Kidney/Liver blood and Yin.
- He Shou Wu - Tonifies Liver/Kidney, supports hair and vitality.
- Shan Zhu Yu - Astringes Kidney essence, reduces frequent urination.
- Shan Yao - Strengthens Spleen and Kidneys, stabilizes blood sugar.
- Gou Qi Zi - Nourishes Liver/Kidney, improves vision.
- Wu Wei Zi - Astringes Lung/Kidney Qi, improves mental focus.
- Mu Dan Pi - Clears deficiency heat, cools blood.
- Fu Ling & Ze Xie - Drain dampness to prevent edema and urinary issues.
- Rou Gui & Fu Zi - Warm Kidney Yang, improve circulation.
- Ren Shen - Greatly tonifies Qi, enhances energy and immunity.
- Mai Dong - Nourishes Yin & moistens dryness.
- Ba Ji Tian - Tonifies Kidney Yang & Strengthens Bones/Tendons
- Chen Pi - Regulates Qi & Relieves Stagnation

TREATS - Age-related fatigue & weakness. Osteoporosis & joint pain. Cognitive decline & memory issues. Benign prostate hyperplasia (BPH) & urinary frequency.

Hypertension (due to Yin deficiency). Mild diabetes (Xiao Ke syndrome). Sexual dysfunction (erectile dysfunction, low libido)

CONTRAINDICATIONS & CAUTIONS - Excess Heat or Fire. Damp-Heat with Infection. Hypertension (Yang Excess Type) - Use cautiously with rising Liver Yang (headaches, irritability). Digestive Weakness with Stagnation. Fu Zi is contraindicated in pregnancy.

1.4 FREQUENCY ALCHEMY

Soundwave Activation for Mind, Body & Memory:

Activate Your Mind & Body with Science-Backed Sound Frequencies. This collection ble nds Solfeggio tones, chakra harmonics, and binaural beats with mathematically encode d patterns (Pi, Tesla 3-6-9) designed to enhance focus, relaxation, and energy flow.

- Explore inner spiritual genetic memory, your role in a remote past.

- The reproductive trigger in Humans which recruits different genes in both sexes now available together as a single recording which does not include sex related hormonal support. This trigger might attract feral spirits who suffer temporary memories blackout.

- Immune recognition' (MHC peptides) optimization can be a tool to spot on the fly long gone past social relationships.

- Twin Flame synchronization through immersive audio.

- Chakra Resonance, Solfeggio Frequencies.

- Mathematical Sequences (Pi, Tesla 3-6-9)

- Includes references to The Alien Interview, Lawrence R. Spencer’s research, and links to expanded materials for deeper study.

- Cognitive Augmentation via Non-Terrestrial Data Streams (Ref: Alien Interview, L.R. S pencer).

(Supplemental materials: Raelian Embassy Petition, Post-Interview Analysis.)

* Use for meditation, biohacking, or expanded awareness.

1.4.1 Chakras Body Tuner

https://archive.org/details/Chakras_Body_Tuner

Chakras Body Tuner

The Three Realms of Body, Mind and Spirit and the Four Functions of Willing, Feeling, Thinking and Sensing in the relationship to the 7 major Chakras using its Body Tuner fre quencies.

1st. Chakra - Sensing - 99 Hz
2nd. Chakra - Thinking - 104.25 Hz
3rd. Chakra - Feeling - 132 Hz
4th. Chakra - Willing - 159.75 Hz
5th. Chakra - Body - 185.25 Hz
6th. Chakra - Soul - 213 Hz
7th. Chakra - Spirit - 240.75 Hz

MEDITATION
01.- Soul Willing - 213, 159.75 Hz
02.- Soul Feeling - 213, 132 Hz
03.- Soul Thinking - 213, 104.25 Hz
04.- Soul Sensing - 213, 99 Hz

05.- Body Willing - 185.25, 159.75 Hz
06.- Body Feeling - 185.25, 132 Hz
07.- Body Thinking - 185.25, 104.25 Hz
08.- Body Sensing - 185.25, 99 Hz

09.- Spirit Willing - 240.75, 159.75 Hz
10.- Spirit Feeling - 240.75, 132 Hz
11.- Spirit Thinking - 240.75, 104.25 Hz
12.- Spirit Sensing - 240.75, 99 Hz

CONCENTRATION
01.- Soul Willing - 213, 159.75 Hz
02.- Body Sensing - 185.25, 99 Hz
03.- Spirit Thinking - 240.75, 104.25 Hz
04.- Soul Feeling - 213, 132 Hz
05.- Body Willing - 185.25, 159.75 Hz
06.- Spirit Sensing - 240.75, 99 Hz
07.- Soul Thinking - 213, 104.25 Hz
08.- Body Feeling - 185.25, 132 Hz
09.- Spirit Willing - 240.75, 159.75 Hz
10.- Soul Sensing - 213, 99 Hz
11.- Body Thinking - 185.25, 104.25 Hz

12.- Spirit Feeling - 240.75, 132 Hz

CONTEMPLATION
01.- Spirit Feeling - 240.75, 132 Hz
02.- Body Thinking - 185.25, 104.25 Hz
03.- Soul Sensing - 213, 99 Hz
04.- Spirit Willing - 240.75, 159.75 Hz
05.- Body Feeling - 185.25, 132 Hz
06.- Soul Thinking - 213, 104.25 Hz
07.- Spirit Sensing - 240.75, 99 Hz
08.- Body Willing - 185.25, 159.75 Hz
09.- Soul Feeling - 213, 132 Hz
10.- Spirit Thinking - 240.75, 104.25 Hz
11.- Body Sensing - 185.25, 99 Hz
12.- Soul Willing - 213, 159.75 Hz

1.4.2 Chakras Energetic Stimulation

https://archive.org/details/Chakras_Energetic_Stimulation

Chakras Energetic Stimulation

The Three Realms of Body, Mind and Spirit and the Four Functions of Willing, Feeling, Thinking and Sensing in the relationship to the 7 major Chakras using its Energetic Stim ulation frequencies.

1st. Chakra - Sensing - 194.18 Hz - Earth's Day
2nd. Chakra - Thinking - 210.42 Hz - Synodic Moon
3rd. Chakra - Feeling - 126.22 Hz - The Sun
4th. Chakra - Willing - 136.10 Hz - Earth Year
5th. Chakra - Body - 141.27 Hz - Mercury
6th. Chakra - Soul - 221.23 Hz - Venus
7th. Chakra - Spirit - 172.06 Hz - Platonic Year

MEDITATION
01.- Soul Willing - 221.23, 136.10 Hz
02.- Soul Feeling - 221.23, 126.22 Hz
03.- Soul Thinking - 221.23, 210.42 Hz
04.- Soul Sensing - 221.23, 194.18 Hz

05.- Body Willing - 141.27, 136.10 Hz
06.- Body Feeling - 141.27, 126.22 Hz
07.- Body Thinking - 141.27, 210.42 Hz

08.- Body Sensing - 141.27, 194.18 Hz

09.- Spirit Willing - 172.06, 136.10 Hz
10.- Spirit Feeling - 172.06, 126.22 Hz
11.- Spirit Thinking - 172.06, 210.42 Hz
12.- Spirit Sensing - 172.06, 194.18 Hz

CONCENTRATION
01.- Soul Willing - 221.23, 136.10 Hz
02.- Body Sensing - 141.27, 194.18 Hz
03.- Spirit Thinking - 172.06, 210.42 Hz
04.- Soul Feeling - 221.23, 126.22 Hz
05.- Body Willing - 141.27, 136.10 Hz
06.- Spirit Sensing - 172.06, 194.18 Hz
07.- Soul Thinking - 221.23, 210.42 Hz
08.- Body Feeling - 141.27, 126.22 Hz
09.- Spirit Willing - 172.06, 136.10 Hz
10.- Soul Sensing - 221.23, 194.18 Hz
11.- Body Thinking - 141.27, 210.42 Hz
12.- Spirit Feeling - 172.06, 126.22 Hz

CONTEMPLATION
01.- Spirit Feeling - 172.06, 126.22 Hz
02.- Body Thinking - 141.27, 210.42 Hz
03.- Soul Sensing - 221.23, 194.18 Hz
04.- Spirit Willing - 172.06, 136.10 Hz
05.- Body Feeling - 141.27, 126.22 Hz
06.- Soul Thinking - 221.23, 210.42 Hz
07.- Spirit Sensing - 172.06, 194.18 Hz
08.- Body Willing - 141.27, 136.10 Hz
09.- Soul Feeling - 221.23, 126.22 Hz
10.- Spirit Thinking - 172.06, 210.42 Hz
11.- Body Sensing - 141.27, 194.18 Hz
12.- Soul Willing - 221.23, 136.10 Hz

1.4.3 Chakras Awareness-Focus

https://archive.org/details/Chakras_Awareness_And_Focus

Chakras Awareness And Focus

The Three Realms of Body, Mind and Spirit and the Four Functions of Willing, Feeling, Thinking and Sensing in the relationship to the 7 major Chakras using its Awareness an

d Focus frequencies.

1st. Chakra - Sensing - 256 Hz - Root
2nd. Chakra - Thinking - 288 Hz - Sacral
3rd. Chakra - Feeling - 320 Hz - Solar Plexus
4th. Chakra - Willing - 341 Hz - Heart
5th. Chakra - Body - 384 Hz - Throat
6th. Chakra - Soul - 448 Hz - 3rd Eye
7th. Chakra - Spirit - 480 Hz - Crown

MEDITATION
01.- Soul Willing - 448, 341 Hz
02.- Soul Feeling - 448, 320 Hz
03.- Soul Thinking - 448, 288 Hz
04.- Soul Sensing - 448, 256 Hz

05.- Body Willing - 384, 341 Hz
06.- Body Feeling - 384, 320 Hz
07.- Body Thinking - 384, 288 Hz
08.- Body Sensing - 384, 256 Hz

09.- Spirit Willing - 480, 341 Hz
10.- Spirit Feeling - 480, 320 Hz
11.- Spirit Thinking - 480, 288 Hz
12.- Spirit Sensing - 480, 256 Hz

CONCENTRATION
01.- Soul Willing - 448, 341 Hz
02.- Body Sensing - 384, 256 Hz
03.- Spirit Thinking - 480, 288 Hz
04.- Soul Feeling - 448, 320 Hz
05.- Body Willing - 384, 341 Hz
06.- Spirit Sensing - 480, 256 Hz
07.- Soul Thinking - 448, 288 Hz
08.- Body Feeling - 384, 320 Hz
09.- Spirit Willing - 480, 341 Hz
10.- Soul Sensing - 448, 256 Hz
11.- Body Thinking - 384, 288 Hz
12.- Spirit Feeling - 480, 320 Hz

CONTEMPLATION
01.- Spirit Feeling - 480, 320 Hz
02.- Body Thinking - 384, 288 Hz
03.- Soul Sensing - 448, 256 Hz
04.- Spirit Willing - 480, 341 Hz
05.- Body Feeling - 384, 320 Hz

06.- Soul Thinking - 448, 288 Hz
07.- Spirit Sensing - 480, 256 Hz
08.- Body Willing - 384, 341 Hz
09.- Soul Feeling - 448, 320 Hz
10.- Spirit Thinking - 480, 288 Hz
11.- Body Sensing - 384, 256 Hz
12.- Soul Willing - 448, 341 Hz

1.4.4 Chakras Resonance

https://archive.org/details/Chakras_Resonance

Chakras Resonance

The Three Realms of Body, Mind and Spirit and the Four Functions of Willing, Feeling, Thinking and Sensing in the relationship to the 7 major Chakras using its Resonance fre quencies.

1st. Chakra - Sensing - Red - 8 Hz
2nd. Chakra - Thinking - Orange - 9 Hz
3rd. Chakra - Feeling - Yellow - 10 Hz
4th. Chakra - Willing - Green - 10.5 Hz
5th. Chakra - Body - Sky Blue - 12 Hz
6th. Chakra - Soul - Indigo - 13 Hz
7th. Chakra - Spirit - Violet - 15 Hz

MEDITATION
01.- Soul Willing - 13, 10.5 Hz
02.- Soul Feeling - 13, 10 Hz
03.- Soul Thinking - 13, 9 Hz
04.- Soul Sensing - 13, 8 Hz

05.- Body Willing - 12, 10.5 Hz
06.- Body Feeling - 12, 10 Hz
07.- Body Thinking - 12, 9 Hz
08.- Body Sensing - 12, 8 Hz

09.- Spirit Willing - 15, 10.5 Hz
10.- Spirit Feeling - 15, 10 Hz
11.- Spirit Thinking - 15, 9 Hz
12.- Spirit Sensing - 15, 8 Hz

CONCENTRATION

01.- Soul Willing - 13, 10.5 Hz
02.- Body Sensing - 12, 8 Hz
03.- Spirit Thinking - 15, 9 Hz
04.- Soul Feeling - 13, 10 Hz
05.- Body Willing - 12, 10.5 Hz
06.- Spirit Sensing - 15, 8 Hz
07.- Soul Thinking - 13, 9 Hz
08.- Body Feeling - 12, 10 Hz
09.- Spirit Willing - 15, 10.5 Hz
10.- Soul Sensing - 13, 8 Hz
11.- Body Thinking - 12, 9 Hz
12.- Spirit Feeling - 15, 10 Hz

CONTEMPLATION
01.- Spirit Feeling - 15, 10 Hz
02.- Body Thinking - 12, 9 Hz
03.- Soul Sensing - 13, 8 Hz
04.- Spirit Willing - 15, 10.5 Hz
05.- Body Feeling - 12, 10 Hz
06.- Soul Thinking - 13, 9 Hz
07.- Spirit Sensing - 15, 8 Hz
08.- Body Willing - 12, 10.5 Hz
09.- Soul Feeling - 13, 10 Hz
10.- Spirit Thinking - 15, 9 Hz
11.- Body Sensing - 12, 8 Hz
12.- Soul Willing - 13, 10.5 Hz

1.4.5 Chakras Solfeggio Energy Tuner

https://archive.org/details/Chakras_Solfeggio_Energy-Tuner

Chakras Solfeggio Energy Tuner

The Three Realms of Body, Mind and Spirit and the Four Functions of Willing, Feeling, Thinking and Sensing are connected to the 7 major Chakras. The Solfeggio scale provid es here the energy tuner frequencies used to fix the boundaries of the relationship betw een Realms and Functions.

1st. Chakra - Sensing - 396 Hz - Liberating guilt and fear
2nd. Chakra - Thinking - 417 Hz - Undoing situations and facilitating change
3rd. Chakra - Feeling - 528 Hz - Transformation and miracles (DNA Repair)
4th. Chakra - Willing - 639 Hz - Connecting/relationships

5th. Chakra - Body - 741 Hz - Awakening intuition
6th. Chakra - Soul - 852 Hz - Returning to spiritual order
7th. Chakra - Spirit - 963 Hz - Immortal Spirit

01 - MEDITATION
01.- Soul Willing - 852 Hz, 639 Hz
02.- Soul Feeling - 852 Hz, 528 Hz
03.- Soul Thinking - 852 Hz, 417 Hz
04.- Soul Sensing - 852 Hz, 396 Hz

05.- Body Willing - 741 Hz, 639 Hz
06.- Body Feeling - 741 Hz, 528 Hz
07.- Body Thinking - 741 Hz, 417 Hz
08.- Body Sensing - 741 Hz, 396 Hz

09.- Spirit Willing - 963 Hz, 639 Hz
10.- Spirit Feeling - 963 Hz, 528 Hz
11.- Spirit Thinking - 963 Hz, 417 Hz
12.- Spirit Sensing - 963 Hz, 396 Hz

02 - CONCENTRATION
01.- Soul Willing - 852 Hz, 639 Hz
02.- Body Sensing - 741 Hz, 396 Hz
03.- Spirit Thinking - 963 Hz, 417 Hz
04.- Soul Feeling - 852 Hz, 528 Hz
05.- Body Willing - 741 Hz, 639 Hz
06.- Spirit Sensing - 963 Hz, 396 Hz
07.- Soul Thinking - 852 Hz, 417 Hz
08.- Body Feeling - 741 Hz, 528 Hz
09.- Spirit Willing - 963 Hz, 639 Hz
10.- Soul Sensing - 852 Hz, 396 Hz
11.- Body Thinking - 741 Hz, 417 Hz
12.- Spirit Feeling - 963 Hz, 528 Hz

03 - CONTEMPLATION
01.- Spirit Feeling - 963 Hz, 528 Hz
02.- Body Thinking - 741 Hz, 417 Hz
03.- Soul Sensing - 852 Hz, 396 Hz
04.- Spirit Willing - 963 Hz, 639 Hz
05.- Body Feeling - 741 Hz, 528 Hz
06.- Soul Thinking - 852 Hz, 417 Hz
07.- Spirit Sensing - 963 Hz, 396 Hz
08.- Body Willing - 741 Hz, 639 Hz
09.- Soul Feeling - 852 Hz, 528 Hz
10.- Spirit Thinking - 963 Hz, 417 Hz
11.- Body Sensing - 741 Hz, 396 Hz

12.- Soul Willing - 852 Hz, 639 Hz

1.4.6 Decagonal Frequencies

https://archive.org/details/Decagonal_Frequencies

Decagonal Frequencies

1. - The first recording plays a decagonal set of numbers. Originally referring to the Pyth agorean scale in a representation of the number 384 (http://www.smphillips.8m.com/th e-holistic-pattern.html), The file uses all the digits outside the decagon, while the vertice s play twice the time of the others.

Meditation upon the Vissudha chakra is said to bring about; vision of the three periods, Past, Present and Future; freedom from disease, old age; destruction of dangers; and th e ability to move the three realms of Body, Mind and Spirit.

384-192-96-48-24-12-6-3 Hz - Vissudha Chakra (5th) -Throat

Through meditation on Svadhisthana, the following occult powers are said to be obtaine d. One is freedom from all enemies, and becomes a master spiritual teacher. The words flow like nectar in well-reasoned discourse. One gains loss of fear of water, awareness of astral entities, and the ability to taste anything desired for oneself or others.

288-144-72-36-18-9 Hz - Svadhisthana Chakra (2nd) -Sexual Organs

Meditating on the Muladhara chakra, a person becomes master of speech and leader a mong people, an adept to all kinds of learning. Free from all diseases, with its inmost spi rit filled with gladness. Develops, too, an absolute disposition noted by deep and musica l words.

256-128-64-32-16-8-4-2 Hz - Muladhara Chakra (1st) -Root

2. - The 2nd recording recreates the same decagonal pattern of the 1st, though, taking 448 Hz to calculate the sequence.

Meditation upon Ajna supposedly grants the following occult powers, to quickly enter an others body at will. To become omniscient, realize unity with the Spirit, origin and suppo rt of the phenomenal universe. The ability to create, preserve and destroy the three real ms of Body, Mind and Spirit.

448-224-112-56-28-14-7-3.5 Hz - Ajna Chakra (6th) -Third Eye

3. - In like manner 480 Hz is used in the computation of the 3rd track.

Through meditating on Manipura, one is said to attain the occult power, to create, destro y or save the world.

320-160-80-40-20-10-5-2.5 Hz - Manipura Chakra (3rd) -Navel

Meditating on Sahasrara is said to bring about the occult powers, of transforming into th e divine, and being able to do whatever one wishes.

480-240-120-60-30-15-7.5-3.75 Hz - Sahasrara Chakra (7th) -Crown

4. - Further, the 4th recording takes into consideration 341 Hz.

Meditation on Anahata is said to bring about the following occult powers, to become a m aster of speech, dearer than the dearest to the other sex. The senses are completely un der control, and can enter at will into another's body. (Wikipedia)

341-170.5-85.25-42.625-21.312-10.656-5.328-2.664 Hz - Anahata Chakra (4th) -Heart

1.4.7 Decagon-Solfeggio Arrangement

https://archive.org/details/Decagon-Solfeggio_Arrangement

Decagon-Solfeggio Arrangement

The Solfeggio frequencies in decagonal arrangement.

Originally referring to the Pythagorean scale in a representation of the number 384 (http: //www.smphillips.8m.com/the-holistic-pattern.html). Decagonal arrangements play the di gits outside the decagon, while the vertices play twice the time of the others.

1.4.8 Alien Interview Book

https://exopoliticshongkong.com/uploads/Alien_Interview.pdf

The content of this book is the letter, official Top Secret U.S. Army Air Force interview tr anscripts and personal notes I received from the late Matilda O'Donnell MacElroy. Her l etter to me asserts that this material is based on a series of interviews she conducted wi

th an extraterrestrial being as part of her official duty as a nurse in the U.S. Army Air For ce. The extraterrestrial she interviewed identitied itself as an officer, pilot and engineer o f The Domain Expeditionary Force, a race of beings who have been using the asteroid b elt in our solar system as a intergalactic base of operations for the past 10,000 years. H er dying request was that the transcripts finally be released to the world. In a letter recei ved with the transcripts, Mrs. MacElroy says: "Mankind needs to know the answers to q uestions which are contained in these documents: Who are we? Where did we come fro m? What is our purpose on Earth? If there is intelligent life elsewhere in the universe wh y have they not contacted us? It is vital that people understand the devastating consequ ences to our physical and spiritual survival if we fail to take effective action to undo the l ong-standing and pervasive effects of alien intervention on Earth." (Lawrence R Spence r)

1.4.9 Post-Alien Interview

https://archive.org/details/awakening-to-the-alien-interview-book

Post-Alien Interview

A compilation of reflections, insights, realizations and developments based upon the bo ok Alien Interview edited by Lawrence R Spencer.
https://archive.org/download/awakening-to-the-alien-interview-book/Awakening_to_the_ Alien_Interview_Book.pdf

Contents

1. The Beginning Of The Story
2. Service-To-Self Answers
3. Service-To-Others Answers [Airl]
4. Raelian Embassy
5. What is the human tragedy all about? [Airl]
6. Could you elucidate Immortal Spiritual Beings? [Airl]
7. Mount Bugarach
8. Aesthetic Beauty Trap
9. Identifying The Location Of Amnesia Stations
10. The Voynich Manuscript And Suleiman The Magnificent
11. If Our Questions Are Wrong, How About The Answers? [Lawrence R Spencer]
12. Electromagnetism And Humans
13. Historical Influencers
14. Some Thoughts

The Beginning Of The Story

There was a surprise attack against an expeditionary base of The Domain in the Himala ya's range 8000 years ago. The aggression involved forces from the 'Old Empire'. Unkn owingly, the Domain had stepped into an ongoing 'Old Empire' operation in Earth, wher e they had created a prison planet from an experimental garden without native populatio n.

A part of the 'Old Empire' fleet, after the fall of their home planet into The Domain's han ds, was nearby in support of a Mind Control operation which was being held on this plan et against the population of 'untouchables' from their territories. They had claimed the pl anet as their own, and any transgression according to their laws, deserved punishment. The Domain's expeditionary party headquarters was stationed here as part of a bigger o peration of expansion at this end of the galaxy, after having staked claim of Earth.

By the time being, the Amnesia Machinery from the 'Old Empire' keeps working unsuper vised in three unknown locations. Waiting for the day someone is able to neutralize it an d begin a new era, where people will be able to choose freely between leaving Earth or staying and recover slowly their memory of past lives after death. Meanwhile, some plan etary cultures of strong service-to-self orientation, part of the 'Old Empire', still use Earth to drop here their 'untouchables' now for free. In contrast, The Domain stands as a servi ce-to-others culture where this amnesia practice is not tolerated.

Self management of life in a population under these circumstances, takes another twist. First, one should be able to recall its own origin as being far away from Earth and secon d realize there is not a single reason to be here. Service-to-self political orientation has been and is still the main protagonist, promoted subvertly by the own operators of the 'O ld Empire' through history until now. Whereas service-to-others initiatives by members o f The Domain helped notably to counter their influence they had limited success. Ignora nce that death, likewise, has been manipulated to fit the purpose of the prison is general ized. The resulting Thought evolution has Science ignoring completely the reality of the Spirit and its study, while Religions take advantage of the amnesia between lives to sec ure allegiance purporting nonexistent paradises, hells and gods. Likewise, governments, corporations and financial institutions exert a deep pressure over citizens to keep them from straying away of imposed rules.

Service-To-Self Answers

The meaning of life is reproduction and survival; you can degrade yourself/others to the point you pass unnoticed, or agreed upon, else there will be a punishment. People are j ust an infinitesimal part in this process, if they don't agree, someone will put them back i nto place.

Biological death happens to biological bodies, but the mission is and will always be to pr ovide another challenge. You'll lose identity, and memories, only Self will be able to find its nature in the future.

Peace and fulfillment can only be achieved as a full-time tax paying slave, but wars and unrest make it worth the cost. Make your life a purposeful one by climbing relentlessly th e social ladder, were you can let your light shine, as an example of achievement.

The only chaos you'll find comes from others, so you will have to face this up to establis h truth. There's a star shinning upon you because you belonged to the gods' family befo re you were born. The Universe was created by the silent Power of the Witness.

Your mission in life is to be above others, actively teaching by any means those who do n't conform to the model. If you had to think of a god remember there nobody better tha n yourself. Others are reflecting the idea of perfection upon you, so take it and make yo ur will. The divine He or She has to be likewise; hence play it by the rules, then carry on business.

Truth is relative to the Witness point of view, source of the Universe. Life after death is u pon Self, so live the here and now. Happiness and contentment depend on the power of being able to do what suits best to Self at the right time.

Death is unavoidable for now, until humans find the technology. Self realization comes f rom handling personal power across the challenge. Love is until death makes us apart, t he sharing is never lost. Enlightnment is knowing, understanding and fulfilling Self need s, thus becoming an example. Your unique potentials are within yourself, wake up and p articipate. Keep trust upon you, but exercise the ability to cash on your potentials by obs erving trends, and seizing the moment. There won't be second chances.

If you want more answers after the previous round, keep reading. You don't need to kno w yourself, you are the evidence of yourself. When you see the world with your eyes, fe el it under your feet, above your head, in your hands, then you know everything. You we re born with a particular sex, hence the meaning of life is to find a partner and place in s ociety. This meaning comes from observation, understanding the expectations of those around, and giving people what they want, need, or deserve according to your fair criteri a.

Wisdom is the ability of getting the most while giving the least. In your deep sleep, feel e verything coming to you because you own all that it takes. Your dreams come from the unaware part of Self in the struggle for understanding risks. Deep dreams, sometimes w ill reveal common people misunderstandings, others give you clues on different aspects on experience.

To find your mission in life believe in luck, your good star, and work hard to find the time and place it will be revealed, so you can grasp it up, just for you to make it happen. To fi nd truth you don't need to go far away, or into elaborate thoughts, get inspiration from lif e, instinct and trickery will work to fill the needs. You know something is either true or fal se only in the end, when it looses meaning for everyone else but you, and may be disca rded.

Besides, do never trust others giving you these answers, it could be a trap since this is t he way of nature. Trust only in yourself, else your inner strength and purpose may resen t. Other people's answers are valid just for themselves, you're already in a steady positi on. Figure out what the answers are when the challenges reach your stand. There's no need to rush until the common dream is at a stake.

Service-To-Others Answers (Airl)

(Open the link in your browser to see the picture) https://postimg.cc/sQwTkZYP

I will provide information to you that I think will be beneficial to the well-being of the imm ortal spiritual beings who comprise humanity, and that will foster the survival of all the m yriad life forms and the environment of Earth. The skill required to modify the planet into an ecologically interactive environment that will support billions of diverse species was a n immense undertaking. Specialized consultants from nearly every biotechnology comp any in the galaxy were brought in to help with the project. What you see now on Earth is the huge variety of life forms left behind.

All sentient beings are immortal spiritual beings. You are an "IS-BE", because the prima ry nature of an immortal being is that they live in a timeless state of "is", and the only re ason for their existance is that they decide to "be". Each IS-BE is completely unique in i dentity, power, awareness and ability. No matter how lowly their station in a society, eve ry IS-BE deserves the respect and treatment that I myself would like to receive from oth ers. Each person on Earth continues to be an IS-BE whether they are aware of the fact or not.

Since an IS-BE is not a physical universe entity it has no location in space or time. An I S-BE is literally, "immaterial". They can span great distances of space instantly. They ca n experience sensations, more itensely than a biological body, without the use of physic al sensory mechanisms. An IS-BE can exclude pain from their perception.

Before the formation of the physical universe there was a vast period during which unive rses were not solid, but wholly illusionary. You might say that the universe was a univer se of magical illusions which were made to appear and vanish at the will of the magician. In every case, the "magician" was one or more IS-BEs.

The physical universe is formed from the convergence and amalgamation of many other individual universes, each one of which were created by an IS-BE or group of IS-BEs. T he collision of these illusory universes comingled and coalesced and were solidified to f orm a mutually created universe. Because it is agreed that energy and forms can be cre ated, but not destroyed, this creative process has continued to form an ever-expanding universe of nearly infinite physical proportions.

Each IS-BE entered into the physical universe when they lost their own, "home" univers

e. That is, when an IS-BE's "home" universe was overwhelmed by the physical universe, or when the IS-BE joined with other IS-BEs to create or conquer the physical universe.

On the home planet of an IS-BE their material possessions were not lost, stolen or forgo tten when the being died or left the body. An IS-BE could return and claim the possessio ns.

The first development of biological bodies began in this universe about seventy-four trilli on years ago. It rapidly became a fad for IS-BEs to create and inhabit various types of b odies for an assortment of nefarious reasons: especially for amusement, this is to experi ence various physical sensations vicariously through the body.

Since that time there has been a continuing "de-evolution" in the relationship of IS-BEs t o bodies. As IS-BEs continued to play around with these bodies, certain tricks were intro duced to cause IS-BEs to get trapped inside a body so they were unable to leave again.

This was done primarily by making bodies that appeared sturdy, but were actually very f ragile. An IS-BE, using their natural power to create energy, accidentally injured a body when contacting it. The IS-BE was remorseful about having injured this fragile body. Th e next time they encountered a body they began to be "careful" with them. In so doing, t he IS-BE would withdraw or minimize their own power so as not to injure the body. A ve ry long and treacherous history of this kind of trickery, combined with similar misadventu res eventually resulted in a large number of IS-BEs becoming permanently trapped in b odies.

Of course this became a profitable enterprise for some IS-BEs who took advantage of th is situation to make slaves of others. The resulting enslavement progressed over trillion s of years, and continues today. Ultimately the dwindling ability of IS-BEs to maintain a personal state of operational freedom and ability to create energy resulted in a vast and carefully guarded hierarchy or class system.

Every speck of dust in space, from the size of the tiniest subatomic particle, to the size o f a sun or a magelantic cloud the size of many galaxies, was created from the nothingne ss of a thought. Even the tiniest, individual cells were contrived and coordinated to enab le a microbial entity to sense, and navigate through infinitesimally small spaces. These also came from an idea thought up by an IS-BE.

You, and every IS-BE on Earth, have participated in the creation of this universe. Even t hough you are now confined to a fragile body made of flesh; you live for only 65 short ro tations of your planet around a star; you have been given overwhelming electric shock tr eatments to wipe out your memory; you must learn everything all over again each lifetim e; in spite of all these circumstances, you are who you are and will always be. And, dee p down, you still know that your are and what you know. You are still the essence of you.

The most fundamental problems that must be solved in order to ensure that Earth will n ot be destroyed by technology, are social and humanitarian problems. Therefore, do not

look to scientists to save Earth or the future of humanity. Any so-called "science" that is solely based on the paradigm that existence is composed only of energy and objects m oving through space is not a science. Such beings utterly ignore the creative spark origi nated by an individual IS-BE and collective work of the IS-BEs who continually create th e physical universe and all universes. Every science will remain relatively ineffective or destructive to the degree that it omits or devaluates the relative importance of the spiritu al spark that ignites all of creation and life.

Do not rely on the dogma of physical sciences to master the fundamental forces of creat ion any more than you would trust the chanted incantations of an incense-burning sham an. The net result of both of these is entrapment and oblivion. Scientists pretend to obse rve, but they only suppose that they see, and call it fact. Like the blind man, a scientist c an not learn to see until he realizes that he is blind. The "facts" of Earth science do not i nclude the source of creation. They include only the result, or byproducts of creation. Th e "facts" of science to not include any memory of the nearly infinite past experience of e xistence. The paradigm of science is that creation is all, and the creator is nothing. Relig ion says the creator is all, and the creation is nothing. These two extremes are the bars of a prison cell. They prevent observation of all phenomenon as an interactive whole.

The true geniuses of civilization are those IS-BEs who will enable other IS-BEs to recov er their memory and regain self-realization and self-determination. This issue is not solv ed through enforcing moral regulation on behavior, or through the control of beings thro ugh mystery, faith, drugs, guns or any other dogma of a slave society. And certainly not through the use of electric shock and hypnotic commands!

The survival of Earth and every being on it depends on the ability to recover the memor y of skills you have accrued through the trillenia; to recover the essence of yourself. We are interested in preventing destruction, as well as accelerating the development of tech nologies that will sustain the infrastructures of the global biosphere, hydrosphere and at mosphere. If humanity is to survive, it must cooperate to find effective solutions to the di fficult conditions of your existence on Earth. Humanity must rise above its human form a nd discover where they are, and that they are IS-BEs, and who they really are as IS-BE s in order to transcend the notion that they are merely biological bodies. Once these rea lizations have been made, it may be possible to escape your current imprisonment. Oth erwise, there will be no future for the IS-BEs on Earth.

When one knows that these activities exist, the effects can be observed clearly. The mo st obvious examples of these actions against the human race can be seen as incidents of sudden, inexplicable behavior. They are playing insidious games with no purpose and no goal other than to control and destroy IS-BEs who could otherwise manage themselv es perfectly well, if left alone. Why not keep the inmates fighting between themselves? Why not empower madmen to run the governments of Earth?

The human race will continue to shadow box with this for a long time -as long as it remai ns the human race. Until then, the IS-BEs on Earth will continue to live series of consec utive lives, over and over and over. In between each lifetime an IS-BE is sent back agai

n, to begin all over, as though the new life was the only life they had ever lived. They be gin anew in pain, in misery, and mystery.

Some IS-BEs have been transported to Earth more recently than others. Some IS-BEs have been on Earth only a few hundred years, so they have no personal experiences wi th the earlier civilizations of Earth. They have no experiences of having lived on Earth, s o could not remember a previous existence here, even if their memory was restored. Th ey might, however, remember lives they lived elsewhere on other planets and in other ti mes. Others have been here since the first days of Lemuria. In any case, the IS-BEs of Earth are here forever, until they can break the amnesia cycle, conquer the electronic tr aps set up by their captors and free themselves.

Immortal Spiritual Beings are the source and creators of illusions. Each one, individually and collectively, in their original, unfettered state of being, are an eternal, all-powerful, al l-knowing entity.

IS-BEs create space by imagining a location. The intervening distance between themsel ves and the imagined location is what we call space. An IS-BE can perceive the space a nd objects created by other IS-BEs.

IS-BEs are not physical universe entities. They are a source of energy and illusion. IS-B Es are not located in space or time, but can create space, place particles in space, creat e energy, and shape particles into various forms, cause the motion of forms, and animat e forms. Any form that is animated by an IS-BE is called life.

An IS-BE can decide to agree that they are located in space or time, and that they, them selves, are an object, or any other manner of illusion created by themselves or another or other IS-BEs. The disadvantage of creating an illusion is that an illusion must be conti nually created. If not continually created, it disappears. Continual creation of an illusion r equires incessant attention to every detail of the illusion in order to sustain it.

A common denominator of IS-BEs seems to be the desire to avoid boredom. A spirit onl y, without interaction with other IS-BEs, and the unpredictable motion, drama, and unant icipated intentions and illusions being created by other IS-BEs, is easily bored.

What if you could imagine anything, perceive everything, and cause anything to happen, at will? What if you couldn't do anything else? What if you always knew the outcome of every game and the answer to every question? Would you get bored?

The entire back time track of IS-BEs is immeasurable, nearly infinite in terms of physical universe time. There is no measurable "beginning" or "end" for an IS-BE. They simply e xist in an everlasting now.

Another common denominator of IS-BEs is that admiration of one's own illusions by oth ers is very desirable. If the desired admiration is not forthcoming, the IS-BE will keep cre ating the illusion in an attempt to get admiration. One could say that the entire physical

universe is made of unadmired illusions.

The origins of this universe began with the creation of individual, illusionary spaces. The se were the "home" of the IS-BE. Sometimes a universe is a collaborative creation of illu sions by two or more IS-BEs. A proliferation of IS-BEs, and the universes they create, s ometimes collide or become commingled or merge to an extent that many IS-BEs share d in the co-creation of a universe.

IS-BEs diminish their ability in order to have a game to play. IS-BEs think that any game is better than no game. They will endure pain, suffering, stupidity, privation, and all man ner of unnecessary and undesirable conditions, just to play a game. Pretending that one does not know all, see all and cause all, is a way to create the conditions necessary for playing a game: unknowns, freedoms, barriers and/or opponents and goals. Ultimately, playing a game solves the problem of boredom.

In this fashion, all of the space, galaxies, suns, planets, and physical phenomena of this universe, including life forms, places, and events that have been created by IS-BEs and sustained by mutual agreement that these things exist.

There are as many universes as there are IS-BEs to imagine, build and perceive them, each existing concurrently within its own continuum. Each universe is created using its o wn, unique set of rules, as imagined, altered, preserved or destroyed by one or more IS-BEs who created it. Time, energy, objects and space, as defined in terms of the physica l universe, may or may not exist in other universes. The Domain exists in such a univers e, as well as in the physical universe.

One of the rules of the physical universe is that energy can be created, but not destroye d. So, the universe will keep expanding as long as IS-BEs keep adding more new energ y into it. It is nearly infinite. It is like an automobile assembly line that never stops runnin g and none of the cars are ever destroyed.

Every IS-BE is basically good. Therefore, an IS-BE does not enjoy doing things to other IS-BEs which they themselves do not want to experience. For an IS-BE there is no inher ent standard for what is good or bad, right or wrong, ugly or beautiful. These ideas are a ll based on the opinion of each individual IS-BE.

The closest concept that human beings have to describe an IS-BE is as a god: all-knowi ng, all-powerful, infinite. So, how does a god stop being a god? They pretend NOT to kn ow. How can you play a game of "hide and seek" if you always know where the other pe rson is hiding?

You pretend NOT to know where the other players are hiding, so you can go off to "see k" them. This is how games are created. You have forgotten that you are just "pretendin g". In so doing, IS-BEs become entrapped and enslaved inside a maze of their own devi sing.

How does one create a cage, lock one's own self inside the cage, throw away the key, a nd forget there is a key or a cage, and forget there is an "inside" or "outside", and even f orget there is a self? Create the illusion that there is no illusion: the entire universe is re al, and that no other universe exists or can be created.

On Earth, the propaganda taught and agreed upon is that the gods are responsible, and that human beings are not responsible.You are taught that only a god can create univer ses. So, the responsibility for every action is assigned to another IS-BE or god. Never o neself.

No human being ever assumes personal responsibility for the fact that they, themselves -individually and collectively- are gods. This fact alone is the source of entrapment for e very IS-BE.

(Selected excerpts from the Alien Interview book edited by Lawrence R. Spencer)

Raelian Embassy

Rael, Claude Maurice Marcel Vorilhon, is the founder of the Raelian Movement. In his te achings they claim humans were created by aliens. He has earned a good number of te stimonies both 'good' and 'bad' from people. Since he is controversial, people who adhe re to the system's old beliefs and practices may try to expose him in a bad light. Wherea s his true followers, bound for new frontiers, revere his messages.

Personally, his message rings true to me, possibly the Elohim and the Domain's civilizati on mentioned in Alien Interview are the same, no matter how different is the source of th e experience. I really praise his endeavor of calling common people from all over the wo rld to teach the truth, or reaching out to the polls to create an Embassy for the Elohim.

Check out the project's website at elohimembassy.org

https://www.youtube.com/watch?v=fB37tB5vT_4

Do you want to sign the petition for the Elohim Embassy at change.org?

www.change.org/p/to-all-governments-of-the-earth-support-the-building-of-an-embassy-for-extraterrestrial-humans-the-elohim

What is the human tragedy all about? (Airl)

Biological flesh bodies live for only a very short time -only 60 to 150 years, at most -whe reas doll bodies can be re-used and repaired almost indefinitely.

The first development of biological bodies began in this universe about seventy-four trilli

on years ago. It rapidly became a fad for Immortal Spiritual Beings (IS-BEs) to create an d inhabit various types of bodies for an assortment of nefarious reasons: especially for a musement, this is to experience various physical sensations vicariously through the bod y.

Since that time there has been a continuing "de-evolution" in the relationship of IS-BEs t o bodies. As IS-BEs continued to play around with these bodies, certain tricks were intro duced to cause IS-BEs to get trapped inside a body so they were unable to leave again.

This was done primarily by making bodies that appeared sturdy, but were actually very f ragile. An IS-BE, using their natural power to create energy, accidentally injured a body when contacting it. The IS-BE was remorseful about having injured this fragile body.

The next time they encountered a body they began to be "careful" with them. In so doin g, the IS-BE would withdraw or minimize their own power so as not to injure the body. A very long and treacherous history of this kind of trickery, combined with similar misadve ntures eventually resulted in a large number of IS-BEs becoming permanently trapped i n bodies.

Of course this became a profitable enterprise for some IS-BEs who took advantage of th is situation to make slaves of others. The resulting enslavement progressed over trillion s of years, and continues today.

(Selected excerpts from the Alien Interview book edited by Lawrence R. Spencer)

Could you elucidate Immortal Spiritual Beings? (Airl)

Immortal Spiritual Beings, which I refer to as "IS-BEs", for the sake of convenience, are the source and creators of illusions. Each one, individually and collectively, in their origi nal, unfettered state of being, are an eternal, all-powerful, all-knowing entity.

IS-BEs create space by imagining a location. The intervening distance between themsel ves and the imagined location is what we call space. An IS-BE can perceive the space a nd objects created by other IS-BEs.

IS-BEs are not physical universe entities. They are a source of energy and illusion. IS-B Es are not located in space or time, but can create space, place particles in space, creat e energy, and shape particles into various forms, cause the motion of forms, and animat e forms. Any form that is animated by an IS-BE is called life.

An IS-BE can decide to agree that they are located in space or time, and that they, them selves, are an object, or any other manner of illusion created by themselves or another or other IS-BEs.

The disadvantage of creating an illusion is that an illusion must be continually created. If

not continually created, it disappears. Continual creation of an illusion requires incessan t attention to every detail of the illusion in order to sustain it.

A common denominator of IS-BEs seems to be the desire to avoid boredom. A spirit onl y, without interaction with other IS-BEs, and the unpredictable motion, drama, and unant icipated intentions and illusions being created by other IS-BEs, is easily bored.

What if you could imagine anything, perceive everything, and cause anything to happen, at will? What if you couldn't do anything else? What if you always knew the outcome of every game and the answer to every question? Would you get bored?

The entire back time track of IS-BEs is immeasurable, nearly infinite in terms of physical universe time. There is no measurable "beginning" or "end" for an IS-BE. They simply e xist in an everlasting now.

Another common denominator of IS-BEs is that admiration of one's own illusions by oth ers is very desirable. If the desired admiration is not forthcoming, the IS-BE will keep cre ating the illusion in an attempt to get admiration. One could say that the entire physical universe is made of unadmired illusions.

The origins of this universe began with the creation of individual, illusionary spaces. The se were the "home" of the IS-BE. Sometimes a universe is a collaborative creation of illu sions by two or more IS-BEs. A proliferation of IS-BEs, and the universes they create, s ometimes collide or become commingled or merge to an extent that many IS-BEs share d in the co-creation of a universe.

IS-BEs diminish their ability in order to have a game to play. IS-BEs think that any game is better than no game. They will endure pain, suffering, stupidity, privation, and all man ner of unnecessary and undesirable conditions, just to play a game. Pretending that one does not know all, see all and cause all, is a way to create the conditions necessary for playing a game: unknowns, freedoms, barriers and/or opponents and goals.

Ultimately, playing a game solves the problem of boredom. In this fashion, all of the spa ce, galaxies, suns, planets, and physical phenomena of this universe, including life form s, places, and events that have been created by IS-BEs and sustained by mutual agree ment that these things exist.

There are as many universes as there are IS-BEs to imagine, build and perceive them, each existing concurrently within its own continuum. Each universe is created using its o wn, unique set of rules, as imagined, altered, preserved or destroyed by one or more IS-BEs who created it. Time, energy, objects and space, as defined in terms of the physica l universe, may or may not exist in other universes. The Domain exists in such a univers e, as well as in the physical universe.

One of the rules of the physical universe is that energy can be created, but not destroye d. So, the universe will keep expanding as long as IS-BEs keep adding more new energ

y into it. It is nearly infinite. It is like an automobile assembly line that never stops runnin g and none of the cars are ever destroyed.

Every IS-BE is basically good. Therefore, an IS-BE does not enjoy doing things to other IS-BEs which they themselves do not want to experience. For an IS-BE there is no inher ent standard for what is good or bad, right or wrong, ugly or beautiful. These ideas are a ll based on the opinion of each individual IS-BE.

The closest concept that human beings have to describe an IS-BE is as a god: all-knowi ng, all-powerful, infinite. So, how does a god stop being a god? They pretend NOT to kn ow. How can you play a game of "hide and seek" if you always know where the other pe rson is hiding?

You pretend NOT to know where the other players are hiding, so you can go off to "see k" them. This is how games are created. You have forgotten that you are just "pretendin g". In so doing, IS-BEs become entrapped and enslaved inside a maze of their own devi sing.

How does one create a cage, lock one's own self inside the cage, throw away the key, a nd forget there is a key or a cage, and forget there is an "inside" or "outside", and even f orget there is a self? Create the illusion that there is no illusion: the entire universe is re al, and that no other universe exists or can be created.

On Earth, the propaganda taught and agreed upon is that the gods are responsible, and that human beings are not responsible. You are taught that only a god can create univer ses. So, the responsibility for every action is assigned to another IS-BE or god. Never o neself. No human being ever assumes personal responsibility for the fact that they, the mselves -- individually and collectively -- are gods. This fact alone is the source of entra pment for every IS-BE.

It is my personal belief that the truth should not be sacrificed on the altar of political, reli gious or economic expediency. As an officer, pilot and engineer of The Domain it is my duty to protect the greater good of The Domain and its possessions. However, we cann ot defend ourselves against forces of which we are not aware.

(Selected excerpts from the Alien Interview book edited by Lawrence R. Spencer)

Mount Bugarach

These were my initial notes about Mount Bugarach, in the French province of Aude near the Pyrenees, They are scrambled with information from the Alien Interview book.

key - Long history of documented mysteries
key - The only place in the world which is going to survive Armageddon (1)
key - Doomsayers flock to Bugarach

key - End of times (2)
key - Mother spaceship coming to the rescue (3)
key - Authorities step protection and access
key - The castle of Miglos is believed by some to be an entrance to the "Other World" (4)

Footnotes:

(1) An strategic point for operators of the "Old Empire"?
(2) End of time or preparation for a visit to the first ever candidate/localized mind control device. In theory, when the machine stops working, the spirit of the dead could return to their home in the universe. The immortality of the spirit is the norm in the universe-not th e exception. Properly speaking, there is no native people on this planet.
(3) A Domain's ship prepares to investigate the place.
(4) Another World, or hidden screens and traps around Bugarach.

- Later Timeline

1941-1942 -- destruction of the last 'Old Empire' base in Mars
1988 -- Daniel Bettex demise
August to September, 2007 -- appx date of Matilda's death
2008 -- publication of Alien Interview
2010 -- first press report about doomsday and Bugarach
December 21, 2012 -- UFO sighting in Bugarach (https://youtu.be/ToY5LGCaH3U and/o r https://youtu.be/sTxOT61uKqc)

* People walking in the mountain report that their cameras jammed when they tried to ta ke pictures. They heard strange noises coming from the underground.

* Others who have lived in the small village for a long time say they have heard weird thi ngs near the mountain.

* Daniel Bettex, who came to the site, went on underground expeditions and eventually l ost his life in these endeavors. Curiously enough, his body was found dehydrated within three days following his death.

* The tradition of entrances giving way to large subterranean networks sits within the pa gan Celtic religion, in which hollow hills were deemed to be entrances to “other worlds”, specifically the realm of the fairies.

* Bettex contacted the Cathar organization that had been founded by D?odat Roch?. In his correspondence with the organization, he enquired about places where he could beg in his research. He desired remote locations, so that he was left undisturbed. Roch? thu s advised him to study the sector of Bugarach, which had been little prospected by other members of his organization, even though it was known that the Cathars referred to the mountain. (Cathars were a french branch of the Templars)

* Bettex never disclosed where exactly he did his research, allegedly as a pretense to g ather the necessary equipment he excavated the old castle of Bugarach. After his death, the floors of the castle in Bugarach were filled with ruble and sealed with concrete.

* Today it is assumed the cave system Bettex researched is (or is connected with) the F ont de Dotz, coordinates Latitude : N 42.87818 ?, Longitude : E 2.359127 ?.

* Though details and aspects may differ, in essence, each story follows a similar structu re. Normally, it is an animal or a small child that falls into one of the numerous openings and is found again, sometimes days later, in perfect health -but it turns out they have no memory of their adventure. Sometimes, the missing person is an adult –a hunter, a shepherd, a poacher and in one case even a magistrate– who is discovered after a period of time. His beard was grown, but he had no memory of what happened to him.

* Two accounts speak of two men who accessed the underground, returning with entirely grayed hair! They reported that upon stumbling in the darkness of the underground with people, those who they encountered never were equipped with lighting. But, somehow they managed to move in this darkness, even were able to find an exit.

* Sometimes, the entrance is said to be guarded by a creature; sometimes, it is said that there are phenomenal treasures inside… finally, there is often a story present of a gigantic underground lake, or of major rivers feeding it, though it seems that these are possible to be traversed -even follow them up unknowing where they may lead...

Months later I could not help to notice a relationship between information in the Alien Interview book and Mount Bugarach. It is said that the Pyrenees Range hides one of three underground Amnesia Stations, currently unmanaged. The next step was a long planned visit to Bugarach (1230m) in Aude, France. We arrived the 29th and, next morning, the 30th of April 2016 we woke up to find the car had a flat tyre.

We stopped at a parking place for hikers, and soon after changing clothes were walking up a route that starts some 500m high. After a while into the forest of short trees the trail becomes narrower and steeper. Everything there looks uniform, a single tree species, bushes and, rock types. During the time we spent near the mountain the only animal I saw was a bird. The only sound, apart from either the wind near the top or a soft roar inside my head, was either that of the same bird I saw, or perhaps a similar specimen, every few minutes.

Two notorious features of the path along the woods were a big cube like rock -1.5m sides with engraved names and symbols, and the remainings of a tree that looked as if it was petrified. Out of this tree standing at 50cm tall, protruded two big eye socket cavities from what once were branches. After some thought I concluded the stump looked a lot like an unknown monitoring device.

To my perception, the area was prone to very strong Spirit Sensing activity -on the way back my companion noticed a woman carrying a Native American Spirit Catcher. I thought that Mount Bugarach was indeed a catalyzer of this and other energies, that actually we were close to a likely underground location mentioned in Alien Interview -a startling discovery. A type of imprinting created when Spiritual Sensing matches known information.

During the last meters inside the forest there were fewer and shorter trees, while more and bigger bushes could be seen. The wind was so strong after coming out of the woods, some 100-200 meters away from top that my friend, a veteran mountaineer, said it did not look a normal phenomenon at all. Upon reaching the height without trees, I had the continuing sensation I was walking over hollow ground.

My friend was eager to reach the highest point. He brought a picture of the inside of a cave, seemingly a refuge where some unknown artist had painted motifs. Meanwhile, I stood standing for a few minutes at the eerie smile area at the top and took the way back very slowly, occasionally giving myself time to notice the place for what it seemed long minutes. Just spiritually sensing the area, in a frame of induced panic produced by its electromagnetic fields to disengage myself from the experience and return to my normalcy.

(Open the link in your browser to see the picture) https://postimg.cc/mhzhqWNJ

Mt Bugarach according to geologists is an upside down mountain. That is, the material at the top is older than that below. These geologists suggest this is due to uplift of the Pyrenees. However, tying up the reports with data from the Alien Interview book and 2012 events the reason could be different. Perhaps they dug out a hole to build the installation inside and covered up the difference with the piled soil.. In whose case, the deepest-older substrate from the perforation would have been laid at the top surface of the mountain, just over the installation.

The best advice for truth-seekers is to trust their senses after having experienced the Aesthetic Beauty Trap recording. Be aware of what Alien Interview says about Amnesia Installations and, next time you visit Mt Bugarach ask your intuition.

Nobody knows when or how, but there is some hope this type of secret alien activity is uncovered and deactivated better sooner than later in the future. According to the Alien Interview book "Theoretically, if the amnesia mechanisms being used against Earth could be broken entirely, Immortal Spiritual Beings (IS-BEs) would regain all of their memory!" (Alien Interview)

"He who looks will not see it;
He who listens will not hear it;
He who gropes will not grasp it.
The formless nonentity, the motionless source of motion.
The infinite essence of the spirit is the source of life.

Spirit is self.
Walls form and support a room,
yet the space between them is most important.
A pot is formed of clay,
yet the space formed therein is most useful.
Action is caused by the force of nothing on something,
just as the nothing of spirit is the source of all form.

One suffers great afflictions because one has a body.
Without a body what afflictions could one suffer?
When one cares more for the body than for his own spirit,
One becomes the body and looses the way of the spirit.
The self, the spirit, creates illusion.

The delusion of Man is that reality is not an illusion.
One who creates illusions and makes them more real than
reality, follows the path of the spirit and finds the
way of heaven"

(Laozi)

Aesthetic Beauty Trap

Early in the 20th century a pharmacist, Alfred Partheil, noted the relationship between the molecular weight of the elements and sound frequency, later redefined at a 1Da=1Hz ratio. Endogenous hormones, proteins and the like in DNA are readily expressed when listening to their frequency.

In this project, we have to simulate the interaction between IZUMO1 and IZUMO1R proteins to validate the information from the book Alien Interview -regarding its debilitating effect and potential for addiction. The contact between ‘male pain’ (IZUMO1) protein in sperm and ‘female aesthetic beauty’ (IZUMO1R) receptor in the egg, produces the combination of electronic waves of pain and beauty that causes non-physical higher sentient beings to get stuck in the body.

"Another important mechanism used in the reproductive process, especially with Homo Sapiens type bodies, is the implantation of a "chemical-electrical trigger" mechanism in the body. The "trigger" which attracts Immortal Spiritual Beings (IS-BEs) to inhabit a human body, or any kind of "flesh body", is the use of an artificially imprinted electronic wave which uses "aesthetic pain" to attract the IS-BE." (Alien Interview book edited by Lawrence R. Spencer)

The theory behind is that since a spirit cannot be "killed," to "establish domination" the objective is to capture and immobilize the victim -the book says.

This mp3 assumes the frequencies below are the scalar equivalent of the molar masses subject of the inquiry:

713.028 Hz - IZUMO1
525.147 Hz - IZUMO1R

A first audition will have reduced effects due to self-resistance toward change. The third audition within the following 24 hours triggers the full experience.

Immortal Spiritual Beings belong to the non-physical universe, however, they can inhabit bodies -either biological or non-biological, because they are always the source of life within.

Still another trap keeps Immortal Spiritual Beings (ISBE's) attached to Earth. They are the Amnesia Stations. I have visited one of the three locations, Mt. Bugarach. It was utterly sad to observe the different attitudes departed souls take when forced upon something.

There is no proof that humans, animals and flora are native to Earth. Moreover, Earth is the way it is for not yet known causes. Human nature in this planet seems bound to be born in amnesia for secret reasons, and legitimizing unproved knowledge is always a form of superstition.

https://archive.org/download/Aesthetic_Beauty_Trap/Aesthetic_Beauty_Trap.mp3

The concept of human-fertilization involves a male and a female human specimens. These specimens embody by principle the attributes of male "pain" (IZUMO1 gene) and female "aesthetic beauty" (IZUMO1R gene) to achieve the impregnation of a third entity still in the "non-physical plane".

As a matter of fact, it does not matter for the experiment whether the potential entity in the "non-physical plane" has its cache of memories, identity, talents and abilities intact or not. The procedure of sex must be carried on between both specimens in such an environment that "non-physical entities" are allowed to be lured in.

Other things being equal, the procedure may fail either in the absence of an entity to lure -like in Mars, or the existence of such a high-voltage electric field surrounding the subjects that impedes access. The process for the new life begins soon after the chemical reaction between both proteins is achieved.

Here is the link to an article about the Aethetic Pain-Beauty Trap, or IZUMO1-IZUMO1R interaction as seen by recent experimentation.

https://www.theglobeandmail.com/technology/science/scientists-capture-most-intimate-view-yet-of-human-conception/article30466138/comments/+

A video of the chemical reaction (https://youtu.be/ovzGmRrtVys)

As a final cautionary note, unless efforts are made to neutralize the machinery of amnesia and study the immaterial part of Humans, outstanding implications are,

- Manned space trips of a duration longer than human life aboard cannot take place.

- Fertilization of animals is not possible outside of Earth's orbit.

- There is no way of creating permanent colonies on either the Moon or Mars.

- Cryogenic preservation is not a viable alternative.

- Transhumanism, transplanting the Spiritual Essence to a non-biological body does not work either.

- Other undesirable situations such as overpopulation, all sorts of pollution, resource depletion and, waste accumulation will ensue.

Identifying The Location Of Amnesia Stations

There have been in the human past a number of legends which refer to the Amnesia Stations mentioned in the Alien Interview* book by LRS. The electromagnetic fields in the, so called, Amnesia Stations possibly have the power to react based upon movements in its vicinity. Perhaps one of the best known examples of Amnesia Stations in the eastern tradition is the legend of Shambhala. Nicholas Roerich (1874-1947), a researcher of Shambhala, does not pinpoint a specific location but he offers a timely description:

“… Moving sands. Like miserly guardians they defend the treasures which sometimes appear on the surface. Nobody shall dare to take them because they are guarded by hidden forces and can be given out only at a predestined time. From the earth are spreading some poisonous essences. Do not lean over the ground, do not try to raise from the ground that which does not belong to you. Otherwise you will fall dead, as falls the robber.

An experienced rider sends a dog before him, because the dog will first feel the influences of these earthly essences. Even an animal will not dare to enter the forbidden zone. No bonfires will attract you in these hidden places. Only some vultures will fly high over the mysterious land. Are they not also guardians? And to whom belong the bones, which glimmer so whitely on the sands? Who was this intruder, who dishonored the predestined dates? A huge black vulture rushes over the camp."

Amnesia Stations have external, internal and alternative meanings. The external

meaning understands that they exist as a physical place, although only individuals with the appropriate level of knowledge can attain it and experience it as such. This external meaning is best elaborated by Gurdjieff when he writes that most humans are machines because they remain in the lower three chakras of survival, greed, and fear. Hence, bound to be prey of scientifically induced panic attacks. The inner meaning refers to an understanding of what they actually represent. The alternative meaning relates to the realization of their power.

How to know then when you are either close or right over one of those Amnesia Stations?

1.- The continuous operation of the machinery is able to create hypnotic states making people feel more vulnerable than they are, thus triggering psychopathic exacerbation in those prone to. Also, this functioning is the factor which prevents some meditators going from enjoyment of the integration with the universe to direct interaction. Besides, diverse electromagnetic programs of the machine attempt to manipulate Earth IS-BEs born in amnesia and alien visitors alike.

It is my guess that the other two locations feature too extreme weather just like the Mistral winds in Bugarach. One of my suspected locations is somewhere not far from Kifuka in South Kivu, DR Congo near the Rwenzori Mts. which boasts the most lighting strikes per year in the World. The third location is northwest of Quinghai Lake in China, thus featuring extreme day to night temperature changes. Roerich was in this area when he saw an UFO. Weather at these locations is discouraging at best for human and animal inhabitation. There are also magnetic interferences to electronic devices, the likes of scarce biological life in the vicinity and human conflicts.

2.- The Spirits of the deceased captured by the detection mechanism could amount to some 2000 / Hr in each location. Although we can not see them with the eyes, we are able to perceive personal reactions product of the situation. Empathy toward those IS-BEs (Immortal Spiritual Being) being sequestered is required since each IS-BE is a different universe in itself and they react with different attitudes. They are detected in a sort of frontotemporal screen within the brain, where they can only share emotions.

3.- IS-BEs after being processed by the machine integrate some spiritual control mechanisms, for example -do not forget to return. After the abduction and memory erasure the IS-BE no longer has the mental and spiritual baggage it had before being abducted. ISBEs at this stage are responsible for producing in visitors to the place sudden sharp ice-like penetrating sensations. They want to know what you are, they feel attracted to the particular biochemistry. Soon they will be either looking for reincarnation, or perhaps the most pleasant biochemistry such as the Twin Flame to hang around for a while. The recording of the Aesthetic Beauty Trap has brought me on occasion to similar experiences with these recycled ISBE's.

Local tales, legends can help confirm observations.

* "These electronic monitoring points create force screens designed to detect and capture IS-BEs, when the IS-BE departs the body at death. IS-BEs are brainwashed using extreme electronic force in order to maintain Earth's population in state of perpetual amnesia. Further population controls are installed through the use of long range electronic thought control mechanisms. These stations are still in operation and they are extremely difficult to attack or destroy..."

The Voynich Manuscript And Suleiman The Magnificent

In the life of the average person there are still issues which cannot be solved through enforcing moral regulation on behavior, or through the control of people through mystery, faith, drugs, guns or any other dogma. Namely, restoring the individual memory to regain self-realization and self-determination. Some paragraphs from Matilda notes to the Alien Interview book by LRS read:

"... another major advance occurred recently. An acquaintance of The Commanding Officer of The Domain Expeditionary Force Space Station is an IS-BE who had once been an important engineer and officer in the "Old Empire" Space Fleet. This engineer, in a previous lifetime on Earth, was Suleiman The Magnificent. His assistant was a harem girl who rose up from slavery to become his wife and rule the Ottoman empire with him. He became an "untouchable" himself about 10,000 years ago and was sentenced to Earth for leading a mutiny against the oppressive regime of the "Old Empire".

The engineer was trained in Advanced Scientific Improvisation Theory thousands of years ago. This man has applied his expertise to helping The Domain solve the apparently unsolvable problem of rescuing the members of the Lost Battalion, as well as the IS-BEs on Earth.

Careful observation and experimental analysis of the mechanics of memory in IS-BEs by he (Suleiman The Magnificent) and his wife, who assisted him, led to the realization that IS-BEs can recover from amnesia and also regain lost abilities. Together they discovered and developed effective methods that they used to rehabilitate their own memories. They eventually codified their methods so that others can safely be trained to apply them to themselves and others, without detection by the "Old Empire" thought control operators. "

Allegedly the only manuscript from the time of Suleiman with a certain aura of mystery is the so called Voynich Manuscript. It is notorious because, so far, has not been deciphered. According to some sources Ogier Ghiselin Busbecque got the book from Suleiman, and took it with him to Austria. The book, filled with codified text and drawings, appears to be a herbal medicine treatise of the time. It is uncertain whether or not scholars can make sense of the manuscript without more hints about the content. However, some attempts to translation I have read support this theory.

In the same line of thought comes the Genetic Memories mp3, based upon sound frequencies of the chakras and Airl quotes translated into music. The snippets of text related to IS-BEs are taken from the Alien Interview book.

https://archive.org/download/Genetic_Memories_Project/09_Genetic_Memories_93m_session.mp3
https://archive.org/download/TheVoynichManuscript/Voynich_Manuscript.pdf
https://archive.org/download/1947RoswellAI.INTERVIEWMatildaODonnellMacElroy/1947_Roswell%20AI.%20INTERVIEW%20-%20Matilda%20O%20Donnell%20MacElroy.pdf

If Our Questions Are Wrong, How About The Answers? (Lawrence R Spencer)

One of the most startling revelations to come out of the “Alien Interview” transcripts are: 1) Humanity is not asking the right questions about itself, life, the universe, the gods, evolution, religion, or just about anything else! How can we advance our understanding of our existence if we don’t even know who we are, how we came to be here, and what relationship we have to the rest of existence? 2) If the information provided by Airl in the interview transcripts is true, the people of Earth are in a situation that makes the worst science fiction monster movie nightmare seem like a kids birthday party, by comparison.

Obviously, the myopically isolated placement of Mankind on a tiny planet on the rim of a galaxy, disconnected from any other discernible life forms, is an overwhelming disadvantage, to say the least. The recorded memory of Mankind is barely more than 10,000 years, at best. One obvious question is “where did the human race come from?”. Really. The evidence indicates that all of the varied races of Mankind just sort of “appeared”, fully formed with cultures, language, religion, pyramid building skills, agriculture, mythology, etc., at many places all over the world, simultaneously, about 12,000 years ago. The mythology of every continent in the world reports and earlier, advanced civilization, and a great flood that wiped them out. OK. So, where did they come from?

The mathematical odds that we are the “only intelligent life” in the universe are infinitesimally small. This begs the question, “why do we feel that there must be other intelligent life out there? ” Again, there is no indisputable evidence to answer this. It’s just a “feeling” many of us share. We see UFOs everywhere, apparently, yet there is no indisputable evidence that they exist. The potentials answers are obvious: 1) they don’t really exist 2) they really DO exist, but they don’t want us to know about it. However, there may be real answers to these, and many other questions, contained in the statements of “Airl” the officer, pilot, and engineer of The Domain interviewed by Matilda O’Donnell MacElroy. Let’s assume for a moment that the information in the transcript is factual:

Airl says that she is a member of an intergalactic expeditionary force of “The Domain”, a very advanced civilization which is trillions of year old. She says that Earth is a prison

planet, and we are all inmates being held here without our knowledge and against our will. Were are in a perpetually renewed state of amnesia by our captors. The beings, or “IS-BEs”, sentenced to Earth are all unwanted by the governments of “Old Empire” planets that sent us here. The population of Earth is comprised of psychotic criminals and sexual perverts, co-mingled with artists, geniuses, managers, revolutionaries and a wide variety of “untouchables”. Even though, as “IS-BEs”, we come from a races of beings and civilizations that are trillions of years old, we are all unwanted and forgotten by the societies who have kicked us out and shipped us here. Further, we are forced to inhabit fragile biological bodies from which there is, apparently, no easy escape. We are not in our native place or state of being, anymore than a unicorn could evolve from a goat. Is it any wonder that people find any or all of this difficult to believe?

To compound the overwhelming chaos of our condition, we have been lied to by our captors who have made our condition appear to be something other than what it actually is. False civilizations, cultures and religions, as well as ideas, such as an “evolutionary line”, have been artificially planted on Earth and in the minds of the inmates to create the illusion that we are “native inhabitants” of this planet, along with the indigenous animals in the “zoological prison”. No evidence exists to demonstrate this to be true, regardless of how hard “scientists” try to piece together bits of completely unrelated information to form an argument in favor of it.

Furthermore, this entire sector of the universe is currently being invaded, and will be “assimilated”, over the next few thousand years, into the civilization known as “The Domain”, who have already conquered the “Old Empire” planets from which we were expelled. And, apparently, The Domain is not any more interested in us, than you and I would be interested in visiting the inmates of a high-security prison or insane asylum.

One of the many keys that keep the gates of our prison locked is that this entire “reality”, compared to the “reality” we commonly agree upon, is too “unbelievable”. Very few believe it, or confront it. Why would anyone even want to try? Yet the majority of Earth inhabitants accept, as fact, that there is a “heaven” which not one person has very visited and returned with proof. We are told by priests and politicians to accept their pie-in-the-sky promises as a matter of “faith”, only to be betrayed lifetime after lifetime throughout all of history. No only that, we’re supposed to pay them for the privilege of believing what we can’t see, and what they can’t prove! Somebody’s crazy here.

Isn’t it about time we started asked some questions that are really relevant? Very few people question what they are told to think by priests and politicians, so a “false reality” continues to be hidden right in front of our faces. It is much easier to deny any responsibility for one’s own life, freedom, intelligence and integrity, and blame all of our problems on the gods, or anyone other than ourselves. As a result of this bizarre set of conditions, we live in a world full of death, turmoil, destruction, criminality and perpetual pain mixed with kindness, hope, beauty, wisdom, technical know-how, ambition and spiritual self-awareness shrouded in mystery.

What can we gain from this information? Is it of any real value to us? What can we do

that will make a fundamental difference in our situation? Let’s begin by asking ourselves this question: who are we, really? Airl says we are all “IS-BEs” who have had the memory of our true identities erased in order to keep us captive. The last thing our captors want us to do is to remember who we are, where we came from, and who sent us here. I suggest that these are the very first questions we need to ask. After all, if we knew the answers to these questions, maybe we could remember how to escape from this place.

These, and many more questions, are the subject of this Blog. I, for one, am not content with things as they are. How about you?

(Repost from Lawrence R. Spencer, Editor)

Originally posted 2009-03-05

Electromagnetism And The Human Mind

Electromagnetism is an important factor in the Amnesia Instalations the Alien Interview book mentions. There is already a general concern about the use of wi-fi, televisions, computers or mobiles since they are sources of electromagnetic radiation. Oftentimes reports about dangers or benefits are either way too simple, or very complex. It is not appropriate to compare human to alien sources of electromagnetism.

For the sake of information, the following is an article by Esther Inglis-Arkell posted at io9.gizmodo.com about the effects of electromagnetism in humans.

10 Things an Electromagnetic Field Can Do to Your Brain

We all know that electromagnetic fields are magic and can do anything at any time for any reason. Sometimes, though, they can be harnessed to do certain things in particular. Electromagnetic fields can be applied to the skull, making your brain do strange, and sometimes completely inexplicable things. Find out how scientists use magnetic fields to rip your mind apart, make it better, and have it do tricks like a trained puppy.

10. Shred its DNA

Well, it's no surprise that not all the things a high electromagnetic field can do are good. Actually, even a mild electromagnetic field can wreck a brain if it's applied over a long time. Scientists found that an electromagnetic field applied to lab rats over time resulted in broken strands of DNA in the brain. Not just anywhere - the brain specifically. It's possible that this DNA damage is the cause of brain tumors, and the reason why people don't just walk around with brain-boosting electromagnetic hats all the time.

9. Stimulate its Growth

Oh, electromagnetism! It's such a trickster! One moment its ripping through DNA strands like a pit bull through an old sock, the next minute it's tenderly nurturing the growth of neurons. Scientists found that brains subjected to regular transcranial electromagnetic stimulation for only five days showed an increase in stem cells in the hippocampus. This is the part of the brain that governs memory, making electromagnetic stimulation a possible treatment for Alzheimer's and stroke patients.

8. Train you off food and water

Rats who had been deprived of water were placed in a strong electromagnetic field and offered a sweetened solution. Although they did drink, they drank less than those given the solution without exposure to the electromagnetic field. When rats were given the solution and later exposed to the field, they developed an aversion to the solution over time. Enough electromagnetism may turn you off your favorite food.

7. Make you spin in circles

Other rats (who have a terrible time of it during experiments like these) were found to walk in tight circles under the influence of an electromagnetic field. Scientists think that the field takes out the rats' sense of balance, making them lurch in circles. The lack of balance also may have induced nausea, which causes lethargy and could be one of the reasons that rats go off their feed.

6. Pacify you completely

Transcranial electromagnetic stimulation - subjecting people to strong electromagnetic fields aimed at specific parts of the brain - is sometimes used as a treatment for bipolar disorder or clinical depression. Some patients find an immense relief in this. Other people, who don't suffer from depression, have reason to worry about it. People without any diagnosed medical illness while under such stimulation can be relaxed to a state where they can't think of anything, at all, that bothers them. If that kind of relaxation can be induced at will, it could be used to pacify large parts of the population.

5. Alter your morality

All that relaxation has a price. Sometimes we're meant to fret. For example, if someone is about to cross a dangerous bridge, and we're aware of the chance it can collapse, and they aren't. Those without a magnetic field dancing around their brain, think that allowing the person to cross the bridge would be immoral. Those with a field gaily capering through their neurons think that, as long as this hypothetical person made it to the other side in one piece, there's no real moral problem. Judging the morality of a situation strictly by the outcome makes any crimes with 'attempted' in their description no longer crimes at all. It takes away a person's intentions and bases morality entirely on what happens to occur. Morality becomes a matter of chance.

4. Take out your power of speech but leave your ability to sing

Broca's area in the brain controls the ability to speak. A large electromagnetic field applied to the area takes out that ability entirely. Subjects under this kind of stimulation simply stop speaking the moment the field disrupts that part of the brain, while the rest of the functions are unimpeded. One of those other functions is singing. Although many people think that singing words and speaking words are much the same function, the ability to perform each action is housed in completely different parts of the brain. So people who are unable to talk will sing perfectly normally.

3. Induce panic, disorientation, and deep fear

Although some kinds of electromagnetic fields, applied to certain areas of the brain, pacify people and put them in a good mood, others are said to induce fear. Sometimes people report a persistent, if mild, sense of unease. Others have a more visceral response, feelings of despair and paranoia, sliding into overwhelming terror.

2. Cause Seizures and Death

Under the worst circumstances, exposure to electromagnetic fields can cause a number of serious effects in the brain. Studies have shown that it can change the flow of blood in the brain, and turn off neuron groups. Some people, under the influence of high magnetic fields have caused people to have violent seizures, and even lose consciousness, slip into comas, and die. This is one of the reasons why houses under high electromagnetic fields have ghost stories associated with them. In conjunction with the deep feelings of unease, mysterious seizures and deaths start all kinds of rumors. Of course, those rumors aren't as bad as...

1. Make you see ghosts

Electromagnetic fields, or electric shocks, have induced specific hallucinations in people. Those who are exposed to them, even in laboratory settings, have caused people to complain about a feeling of people following them, talking to them, or watching them. This is not always an uncomfortable sensation. Some people interpret this presence as a malevolent presence, especially if it's coupled with a feeling of unease, but others say they felt an inspiring or comforting presence. Ghost hunters will sometimes say the reverse - that ghosts cause a high electromagnetic field, or sometimes that a high electromagnetic field will allow ghosts to appear. Nobody is sure, yet, what these fields do to ghost brain DNA.

Esther Inglis-Arkell
io9.gizmodo.com/5851828/10-things-an-electromagnetic-field-can-do-to-your-brain

Historical Influencers

History as we know it is a line of events leading -though otherwise unrelated- to the present period. Inasmuch as the main reason behind is past amnesia, we can but speculate regarding the worth of knowing a little more on the history of influencers' sides.

More than one name in the same item means it is the same ISBE (Immortal Spiritual Being).

THE OLD EMPIRE

Prison Staff Operator

1. Asian God Tengri / High Priest of Amun Wennefer / Genghis Khan

2. Akhenaten / Emperor Qin Shi Huang / Muhammad Ali Pasha of Egypt

3. Nefertiti / Neslé-Hannoum (Muhammad Ali Pasha' daughter)

Prison Staff Pilot

1. Tutankhamen / Nicholas I of Russia / Saddam Hussein

2. Mao Zedong

3. Jiang Qing

4. Ramesses II / Francisco Franco Bahamonde

Prison Staff Flight Assistant

1. King Leopold II of Belgium / Jimmy Savile

2. Adolph Hitler

3. Augusto Pinochet

4. Charlotte S. (Nazi Death Camp guard)

Old Empire Fleet Pilot

1. SS-Gruppenfuhrer Reinhard Heidrich

2. George H. W. Bush

3. Juan Domingo Peron

4. Manuel Noriega

Old Empire Fleet Flight Assistant

1. Joseph Stalin

THE DOMAIN

Expeditionary Commander

1. Lord Brahma / Cyrus The Great / Sun Tzu / Hannibal Barca / Aristotle / Roman Emperor Antoninus Pius / King Anawrahta / Saladin / King Gongmin of Goryo / John Zizka / Guy Fawkes / Shivaji Maharaj / Edward Teach -Blackbeard / Karim Khan Zand Sha of Iran / Giussepe Garibaldi / US Gen. George S. Patton

2. Maha Kali / Fu Hao / Boudicca / Laskarina Bouboulina

Expeditionary Pilot Officer

1. Lord Shiva / Mencius / Euripides / Dante Alighieri / Raphael Sanzio / King Charles II of England / Charles Fran?ois de Cisternay du Fay / Oscar Wilde / Nino Bravo

2. Maha Saraswati / Anne Boleyn

3. Lord Krisnha / Pliny the Younger / Faxian / Harun al Rashid / Rumi / Miguel Servet / Donatello / Nicholas Roerich

4. Maha Radha

5. Lord Rama / Confucius / Socrates / Pliny the Elder / Petrarch / Johannes Vermeer / David Hume / Lawrence R Spencer

6. Maha Durga / Laura de Noves / Mary Shelley

7. Lord Ganesh / Siddhartha Gautama / Plato / King Ashoka The Great / Plutarch / Roman Emperor Marcus Aurelius / Guan Yu / King Khosrow I Anushirvan / King Narapatisithu / King Ram Khamaeng / King Sejong of Korea / Alberico Gentili / King Borommakot / Gustave Flaubert / Alberto Lamar Schweyer

8. Maha Lakshmi / Cleopatra VII Philopator / Mona Lisa / Infanta Eulalia of Spain

9. Lord Surya / Xenophanes / Alcibiades / Charlemagne / John Hus / Jules Verne / Agustin Garcia Calvo

10. Maha Sanjna / The real 'Alien Interview' nurse

11. Lord Kartikeya / Thales of Miletus / Pericles / Roman Emperor Hadrian / Leonardo da Vinci / Giordano Bruno / Mark Twain

12. Maha Mata Sita

13. Lord Vishnu

14. Maha Parvati

15. Lord Hanuman / Laozi

16. Maha Shachi

Expeditionary Flight Assistant

1. Rene Descartes / Colonel Gaddafi

2. King Alexander The Great / Christiaan Huygens / Kevin Ayers

3. Eva Duarte Peron

4. Galileo Galilei / Kurt Vonnegut

5. King Herod I The Great / James Dean

6. Denis Diderot / Albert Camus

Some Thoughts

It is very true that the DNA and its interactions are very tangible. Two capable human specimens of opposite sexes can reproduce without even wanting it after a sexual interaction. A pregnancy is always an unpredictable risk factor for a woman.

Without going any further than its appearance, on one hand, the Human Being is preconditioned for the sexual act and reproduction; on the other hand, as newborns we are blank slates. Current thought bias' is to glorify Human Nature based solely on its intelligence. Considering deterministic biological factors and the ghost in the machine, is there a rational space for doubt? Are we really victims of a false flag attack?

On a biological level, with or without Science, with or without Religion, no one is aware either of genes or their daily functioning. Some people believe that Homo Sapiens is Body and Mind, others believe that is Body, Mind, and essential Spirit.

Emotions reflected by religious nonsense encourage a concern when a mixture of beliefs and inappropriate attitudes coalesce due to proven realities on this subject.

Perhaps we should be waiting for NASA to confirm succeeding in experiments on mammal fertilization at the ISS. That would be a serious defeat for those who believe in the component of the essential Spirit in conjunction with Body and Mind.

Somehow, I have come to believe most people regard the Universe as something foreign to them. Thus, while denying their own participation in the formation of this Universe, they allow themselves into manipulation. Denial of themselves becomes the Achilles' heel of the masses, tasked to enforce mind and social control protocols whereby creation is either godly in nature, a government liability or, most often both. A sort of pathological state which hinders Self-Realization.

Every speck, every atom and every biological DNA protein in the Universe is the child of minds like yours or mine. Hence, using the mind we can create relationships few others in the current situation dare to sketch. For example, what do we find in a Periodic Table? A list of the known elements with data of their physical properties. Another example, what do we find in the Genome of a species? A list of the genes that make up the DNA of a particular organism its associations and characteristics.

In either case we have the results of a reverse-engineering job on both a number of Natural Elements and the genes of a biological specimen. We are presented sets of true data which ignores completety the Spiritual Realm -the sound frequencies. An excellent sandwich between the limits of the perceptual basis and the expectations of the researchers who worked on it.

Even without the reverse-engineering job, people in the past were able to use and mix materials, have an understanding of life and, lead their own lives. We know thereof the next step is assigning the data to a proper framework. This is where most people fail because of self-denial and the need to blame others or something else. Never an unnatural pathological state due to amnesia between lives.

The missing dimension in Natural Elements and Biological Life findings lies at the immediate upper level of knowledge. Just grasp the Immortal Spiritual Being level then assume ownership and/or responsibility, no need to seek answers neither in books nor in others. Everything is inside You.

One day you find yourself floating in your own thoughts, watching the 'madness' of life unfolding right in front of your eyes. An unknown guy approaches from behind with 'tickets' for the game, but you have decided to show him how lucky he is. Now he stands alongside yourself on top of a fence. A country man drives a bullock cart full of hay a few meters below. Seconds later two military planes fly low over your heads. All of a sudden you push the guy down below and falls over the hay. He was lucky indeed, still, he cries foul and you receive a red card penalization for the events.

Let us change the sense of the previous paragraph for a minute. You have died and your Immortal Spiritual Being is floating almost in disbelief watching Life. The Amnesia Machinery senses your situation and comes closer to show you the way to more games. At that time and in your own Awareness of the Universe, you despise such intentions and use your Power in an attempt to thwart the situation. Then, the energy grid from the Amnesia Installations activates its carrier strength. Unsuspectedly for your own thought you have been roughly seized by the field of the grid and going into the hullabaloo of the next situation -being born again in amnesia.

Dialogue of the Newly Disembodied Spirit

Voice - Come toward the Light son

Spirit - I have a scheduled foot trip to (...)

Voice - Follow me son

Spirit - Well, let's be patient,

Voice - Son, the time has come to return to the Origin

Spirit - My colleagues cannot fail me

Voice - You have a date with the Light

Spirit - From here and without showing Powers it may be a few years

Voice - It's time to start again

Spirit - The road is sure to be full of thieves at night

Voice - You have to follow me

Spirit - During the day, one step at a time, touching the ground, avoiding everyone and without infatuations

Voice - You must return to the Light

Spirit - Better do not say goodbye, this is personal

Voice - You have to start again, they wait for you

Spirit - (going for a walk) The nights can be spent under a quiet tree

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There must be thousands of individual planetary cultures associated to the Old Empire. Allow me to introduce a few to you. Bear in mind that the pictures below are intended as an educational material, they do not pretend to bring any other association out of this context. These prototypes reflect behind their gaze a remote past, when they were not humans on Earth. Female and male examples included. From left to right:

(Open the link in your browser to see the picture) https://postimg.cc/4nDnR2Wd

1. The original invader race and rulers of the Old Empire home planet until 10,000 years ago

2. Old Empire home planet inhabitants

3. Unknown planetary culture part of the Old Empire

4. Another unknown planetary culture part of the Old Empire

Eduardo Espadas Arrate

1.4.10 Awakening

* https://archive.org/details/Pi_Number_Decagon-Infinity

Mystical number pi is symbol of transcendence and infinity. It appears in equations desc ribing fundamental principles of the universe, often because of pi's relationship to the cir cle and to spherical coordinate systems. Number pi, for example, describes the fundam ental interaction of gravitation as a result of spacetime being curved by matter and ener gy, and the electric field between two electric charges. Originally referring to the Pythag orean scale in a representation of the number 384 (http://www.smphillips.8m.com/the-h olistic-pattern.html). Decagonal arrangements play all the digits outside the decagon, w hile the vertices play twice the time of the others.

* https://archive.org/details/Tesla_Numbers

Nicola Tesla is quoted as saying, "If only the world knew the power of 3 6 9". "If only the world knew the magnificence of 3, 6, and 9, then you would have a key to the universe." This recording mixes music with waves at 3, 6, and 9Hz. Probably he didn't mean it for Hertz waves which are more radiation-like than energy-like, anyway. The result is still ve ry pleasant, energizing, and balancing.

Includes the Tesla Number?s Decagon files in the keys of the three superior Chakras. O riginally referring to the Pythagorean scale in a representation of the number 384 (http:// www.smphillips.8m.com/the-holistic-pattern.html). Decagonal arrangements play all the digits outside the decagon, while the vertices play twice the time of the others.

3 Hz - Increased Reaction Time
6 Hz - Long term memory stimulation; (reduce) unwillingness to work
9 Hz - Blind person phantom touch reading (somatosensory cortex)

* https://archive.org/details/Genetic_Memories_Project

The objective of the files included here is the retrieval of past-life, regressional, or geneti c memories. The general idea is to become aware of the Ajna and Sahasrara Chakras. The procedure involves stimulation of the inner knowledge or Kundalini along with the Aj na Chakra, just before moving into the Sahasrara Chakra. Two extra musical files are re commended to direct the process (see below.)

GENETIC MEMORIES
01 Ajna Chakra 13Hz (10m)
02 Ajna Chakra 221.23Hz (10m)
03 Ajna Chakra 448Hz (10m)
04 Spiritual Manifesto DNA script (18m)
05 Sahasrara Chakra 15Hz (10m)
06 Sahasrara Chakra 172.06Hz (10m)
07 Sahasrara Chakra 480Hz (10m)
08 Spiritual Manifesto DNA script2 (16m)
All together, 09 Genetic Memories (93m)

The Ajna Chakra frequencies allow to realize the absolute spirit that is the origin and su pport of the phenomenological universe, and grasp the nature of the three realms of Bo dy, Mind and Spirit.

Ever since the combination is powerful, it is suggested playing the file below to coordina te the experience. Use it before moving into the Sahasrara Chakra set. This mp3 plays a 13.8 Hz binaural beat frequency associated with the frontal lobes which effects the Se venth Sense, or final decision, mixed with a Spiritual Manifest DNA-type script translate d into music playing the following text:

"The spirit is an immortal entity -it's not born, and cannot die. It exists in a personally po stulated perception of present and future.
Each one is unique in identity, power, awareness, and ability. The spirit does not belong to the physical universe. It is not located in space or time. It can exclude pain from its pe rception and remember its identity back into time. Besides, it can experience sensations more intensely than a biological body, without the use of physical sensory mechanism s."

The Sahasrara Chakra frequencies bring about the ability of switching into the boundles s and almighty essence of Being. In the same manner as above, it is suggested playing the following file to coordinate the experience. Pass it after listening to the Sahasrara C hakra set. The recording contains a 13.8 Hz binaural beat frequency associated with the frontal lobes which effects the Seventh Sense, or final decision, along with another Spiri tual Manifesto DNA script translated into music playing the following text:

"Spirits are not located in space or time, but can create space, place particles in space, create energy, and shape particles into various forms, cause the motion of forms, and a nimate forms. Any form that is animated by a spirit is called life. Spirits can decide to agr ee that they are located in space or time, and that they, themselves, are an object, or an y other manner of illusion created by themselves or another or other spirit."

* https://archive.org/details/Aesthetic_Beauty_Trap

The core concept behind 'sexual reproduction' technology was the invention of a chemic al/electronic interaction called "cyclical stimulus-response generators". This is a progra mmed genetic mechanism which causes a seemingly spontaneous, recurring impulse to reproduce. The same technique was later adapted and applied to biological flesh bodies, including Homo Sapiens."

"Another important mechanism used in the reproductive process, especially with Homo Sapiens type bodies, is the implantation of a "chemical-electrical trigger" mechanism in t he body. The "trigger" which attracts Immortal Spiritual Beings (IS-BEs) to inhabit a hum an body, or any kind of "flesh body", is the use of an artificially imprinted electronic wave which uses "aesthetic pain" to attract the IS-BE."

"The debilitating impact and addiction to the "sexual aesthetic-pain" electronic wave is t he reason that the ruling class of The Domain do not inhabit flesh bodies. This is also w hy officers of The Domain Forces only use doll bodies. This wave has proven to be the most effective trapping device ever created in the history of the universe, as far as I kno w." (Alien Interview book edited by Lawrence R. Spencer)

The recording plays simultaneously both the human male specific IZUMO1 protein and, the human female specific IZUMO1R receptor for IZUMO1 frequencies to simulate the i

nteraction. IZUMO1R is located in the surface of the egg cell, it has the role of recognizi ng its sperm-riding counterpart, IZUMO1, to facilitate fertilization (also available as sepa rate recordings.)

* https://archive.org/details/Twin_Flames_Decagon

Music and frequencies in 12 keys -good to recreate being around the Twin Flame.

The Twin Flame is the original lover embraced by mutual accord ages ago, outside this prison world, and subject to the allegiance of both parties, until agreed otherwise within t he same awareness it took place back then. Everybody has a Twin Flame, often somew here else in this planet or in spiritual form, after its death. It is an Universal law that an I S-BE's (Inmortal Spiritual Being) memory and identity remains with the IS-BE after physi cal demise and into the next incarnation. Hence, relationships lasting millions or billions of years are common. However, our prison world disregards the rules of the Universe th rough the use of physical traps and Mind Control as a means of controlling the resident population of IS-BE's.

The specific frequency that matches feelings toward the Twin Flame is at 24.027 Hz. Th is frequency will work even for the most resilient minds if tried under different stress con ditions, for example, under non-specific angry or upset moods. It works by facilitating a spiritual disposition that highlights current oblivion and lethargy regarding personal resp onsibility loss. The ensuing mind-frame and situation is product of the ongoing Mind Co ntrol operation to confuse and defeat the individual IS-BE.

The Twin Flame's Decagon series uses this frequency, 24.027 Hz and others in the sam e scale, seeking to reproduce the Spiritual titillation native to the relationship. The frequ encies are mixed with algorithmic piano music in the keys of the seven Chakras so as to enhance further personal Awareness. The same set of frequencies plays in these recor dings at different keys.

Originally referring to the Pythagorean scale in a representation of the number 384 (http s://www.smphillips.8m.com/the-holistic-pattern.html). Decagonal arrangements play all t he digits outside the decagon, while the vertices play twice the time of the others.

* https://archive.org/details/Twin_Flames_Reunion

Ten-Fold Journey meditations into Twin Flames Reunion. Better realized if you have se en each other at least once. The four functions of Self, will; sense; think and feel vs Sel f's attributes in a relationship, identity; power; awareness and ability.

* https://archive.org/details/Remembering_Self

Ten-Fold Journey meditations into Remembering-Self. The four functions of Self, will; se nse; think and feel vs Self's historical attributes in time, identity; power; awareness and ability.

* https://archive.org/download/Resonant_Therapy-Molecular_Biology_04/MHC-Related_Peptides_32m_session.mp3

MHC-Related Peptides provide a molecular mechanism by which an individual can sens e the composition and compatibility of vital immune system molecules of a conspecific, with direct consequences for social behavior.

* Visit Raelian Embassy Project at elohimembassy.org or sign your support to the petitio n at change.org

* Lawrence R Spencer presents Alien Interview with subtitles in several languages.

- https://youtu.be/4NXmFl8UcP8
- https://youtu.be/0T3o7xwF9_U
- https://youtu.be/0KxtN2MJhXQ

1.5 DATA TCM HERB FREQUENCIES

HERB ---> FREQUENCY ---> CARRIER FREQUENCIES (Calculated using FreX 1 6 build 2017.04.04 conversions tool)

Ai Ye - 790.5 ---------- 2148.8 5841
An Ye - 390.9 ---------- 1062.5 2888.3
Ba Dou - 500.7 ---------- 1361 3699.7
Ba Ji Tian - 399.9 ---------- 1087.4 2954.8
Ba Qia - 770 ---------- 2093 5689.5
Bai Bian Dou - 396.6 ---------- 1078 2930.5
Bai Bu - 559.8 ---------- 1521.6 4136.3
Bai Fu Zi - 822.9 ---------- 2236.8 6080.4
Bai Guo Ren - 604.2 -------- 1642.3 4464.4
Bai He - 566.4 ---------- 1539.6 4185.1
Bai Ji - 879.3 ---------- 2390.1 6497.2
Bai Ji Li - 403.5 ---------- 1096.8 2981.4
Bai Jie Zi - 839.7 ---------- 2282.5 6204.5
Bai Lian - 512.5 ---------- 1393.1 3786.8
Bai Qian - 428.1 ---------- 1163.6 3163.2

Bai Shao - 787.5 ---------- 2140.6 5818.8
Bai Tu Ling - 911.4 ---------- 2477.4 6734.3
Bai Wei - 666 ---------- 1810.3 4921.1
Bai Xian Pi - 389.1 ---------- 1057.6 2875
Bai Zhi - 538.5 ---------- 1463.7 3979
Bai Zhu - 906 ---------- 2462.7 6694.4
Bai Zi Ren - 562.2 ---------- 1528.2 4154.1
Ban Lan Gen - 549.3 -------- 1499.1 4058.8
Ban Xia - 398.7 ---------- 1083.7 2946
Ban Zhi Lian - 937.2 ---------- 2547.5 6925
Bei Dou Gen - 407.7 ---------- 1108.2 3012.5
Bei Sha Shen - 409.5 ---------- 1113.1 3025.8
Bi Xie - 767.4 ---------- 2086 5670.3
Bian Dou Hua - 543.6 ---------- 1477.6 4016.6
Bian Xu - 451.8 ---------- 1228.1 3338.3
Bie Jia - 488.4 ---------- 1327.6 3608.8
Bing Lang - 932.4 ---------- 2534.5 6889.5
Bing Pian - 977.7 ---------- 2657.6 7224.2
Bo He - 884.4 ---------- 2404 6534.8
Bu Gu Zhi - 435.9 ---------- 1184.8 3220.6
Can Sha - 370.2 ---------- 1006.3 2735.4
Cang Er Zi - 963.9 ---------- 2620.1 7122.3
Cang Zhu - 374.7 ---------- 1018.5 2768.6
Cao Dou Kou - 380.1 ---------- 1033.2 2808.5
Cao Guo - 517.8 ---------- 1407.5 3826
Cao Wu - 916.2 ---------- 2490.4 6769.8
Ce Bai Ye - 926.1 ---------- 2517.4 6843
Cha Ye - 394.8 ---------- 1073.1 2917.2
Chai Hu - 747 ---------- 2030.5 5519.6
Chan Tui - 573.3 ---------- 1558.3 4236.1
Chao Shen Qu - 438.3 ------ 1191.4 3238.6
Che Qian Cao - 508.8 ------- 1383 3759.5
Che Qian Zi - 912.3 ---------- 2479.8 6741
Chen Pi - 405.6 ---------- 1102.5 2997
Chen Xiang - 642.9 ---------- 1747.5 4750.4
Chi Shao - 553.5 ---------- 1504.5 4089.8
Chi Shi Zhi - 142.2 ---------- 386.5 1050.7
Chi Xiao Dou - 686.4 ---------- 1865.8 5071.8
Chong Wei Zi - 577.2 ---------- 1568.9 4264.9
Chu Shi Zi - 503.7 ---------- 1369.1 3721.8
Chuan Bei Mu - 530.4 ---------- 1441.7 3919.1
Chuan Lian Zi - 702.3 ---------- 1909 5189.3
Chuan Niu Xi - 742.2 ---------- 2017.5 5484.1
Chuan Shan Long - 776.7 ------- 2111.2 5739
Chuan Wu - 459.3 ---------- 1248.5 3393.7
Chuan Xin Lian - 505.5 ---------- 1374 3735.1

Chuan Xiong - 501.3 ---------- 1362.6 3704.1
Ci Shi - 159.6 ---------- 433.8 1179.2
Ci Wu Jia - 368.7 ---------- 1002.2 2724.3
Cong Bai - 979.8 ---------- 2663.3 7239.8
Cu - 927.3 ---------- 2520.6 6851.8
Cu San Leng - 592.5 ---------- 2111.2 5739
Da Fu Pi - 672.9 ---------- 1829.1 4972.1
Da Huang - 786.3 ---------- 2137.3 5810
Da Ji - 499.2 ---------- 1356.9 3688.6
Da Qing Ye - 411 ---------- 1117.2 3036.9
Da Suan - 916.8 ---------- 2492.1 6774.2
Da Zao - 372.3 ---------- 1012 2750.9
Dai Zhe Shi - 159.6 ---------- 433.8 1179.2
Dan Dou Chi - 468.3 ---------- 1272.9 3460.2
Dan Nan Xing - 665.4 ---------- 1808.7 4916.6
Dan Shen - 759 ---------- 2063.1 5608.2
Dan Zhu Ye - 383.1 ---------- 1041.3 2830.7
Dang Gui - 564.6 ---------- 1534.7 4171.8
Dang Shen - 765.3 ---------- 2080.3 5654.8
Deng Xin Cao - 661.2 ---------- 1797.3 4885.6
Di Fu Zi - 871.5 ---------- 2368.9 6439.5
Di Gu Pi - 920.1 ---------- 2501 6798.6
Di Huang - 725.1 ---------- 1971 5357.8
Di Long - 952.5 ---------- 2589.1 7038
Di Yu - 858.6 ---------- 2333.9 6344.2
Ding Xiang - 441.3 ---------- 1199.5 3260.7
Dong Chong Xia Cao - 721.2 ----- 1960.4 5328.9
Dong Gua Ren - 449.1 ---------- 1220.7 3318.4
Dong Kui Zi - 483.6 ---------- 1314.5 3573.3
Dou Kou - 854.1 ---------- 2321.6 6310.9
Du Huo - 899.4 ---------- 2444.8 6645.7
Du Yi Wei - 597.9 ---------- 1625.2 4417.9
Du Zhong - 656.4 ---------- 1784.2 4850.1
E Bu Shi Cao - 496.2 ---------- 1348.8 3666.4
E Jiao - 539.1 ---------- 1465.4 3983.4
E Zhu - 450.9 ---------- 1225.6 3331.7
Er Cha - 730.8 ---------- 1986.5 5399.9
Fa Ban Xia - 874.2 ---------- 2376.3 6459.5
Fan Xie Ye - 823.5 ---------- 2238.5 6084.8
Fang Feng - 951.3 ---------- 2585.9 7029.2
Fang Ji - 819.3 ---------- 2227 6053.8
Fen Ge - 670.8 ---------- 1823.4 4956.5
Feng Jiao - 777.6 ---------- 2113.7 5745.7
Feng Mi - 563.4 ---------- 1531.4 4162.9
Fo Shou - 487.2 ---------- 1324.3 3599.9
Fu Ling - 607.5 ---------- 1651.3 4488.8

Fu Pen Zi - 907.2 ---------- 2466 6703.3
Fu Ping - 745.5 ---------- 2026.4 5508.5
Fu Shen - 422.4 ---------- 1148.2 3121.1
Fu Zi - 677.7 ---------- 1842.1 5007.5
Gan Cao - 401.1 ---------- 1090.3 2963.7
Gan Jiang - 648 ---------- 1761.4 4788.1
Gan Sui - 513.9 ---------- 1396.9 3797.2
Gao Ben - 518.7 ---------- 1409.9 3832.7
Gao Liang Jiang - 648.9 ----- 1763.8 4794.7
Ge Gen - 878.4 ---------- 2387.7 6490.5
Gou Ji - 461.4 ---------- 1254.2 3409.3
Gou Qi Zi - 784.8 ---------- 2133.3 5798.9
Gou Teng - 608.4 ---------- 1653.8 4495.5
Gu Sui Bu - 404.4 ---------- 1099.2 2988.1
Gu Ya - 380.7 ---------- 1034.8 2813
Gua Lou - 571.8 ---------- 1554.3 4225
Guan Gui - 694.5 ---------- 1887.8 5131.7
Guang Fang Ji - 797.1 ------ 2166.7 5889.8
Guang Huo Xiang - 425.1 ---- 1155.5 3141
Guang Jin Qian Cao - 638.7 ---- 1736.1 4719.3
Gui Ban - 669.9 ---------- 1820.9 4949.9
Gui Jian Yu - 579.3 ---------- 1574.7 4280.4
Gui Zhi - 757.8 ---------- 2059.9 5599.4
Hai Feng Teng - 421.8 ------- 1146.5 3116.7
Hai Jin Sha - 915.6 ---------- 2488.8 6765.4
Hai Tong Pi - 906.6 ---------- 2464.3 6698.9
Hai Zao - 713.7 ---------- 1940 5273.5
Han Fang Ji - 494.1 ---------- 1343.1 3650.9
Han Shui Shi - 693.6 ---------- 1885.4 5125
He Huan Pi - 791.7 ---------- 2152 5849.9
He Shi - 526.8 ---------- 1431.9 3892.5
He Shou Wu - 809.7 ---------- 2200.9 5982.9
He Ye - 466.8 ---------- 1268.8 3449.2
Hei Dou - 708.9 ---------- 1926.9 5238.1
Hei Zhi Ma - 432.6 ---------- 1175.9 3196.5
Hong Hua - 838.2 ---------- 2278.4 6193.5
Hong Jing Tian - 652.2 ------ 1772.8 4819.1
Hong Qu - 868.8 ---------- 2361.6 6419.6
Hong Shen - 955.5 ---------- 2597.3 7060.2
Hou Pu - 460.2 ---------- 1250.9 3400.4
Hu Gu (peptides) - 484.8 ----- 1317.8 3582.2
Hu Gu - 829.5 ---------- 2254.8 6129.2
Hu Lu Cha - 420.3 ---------- 1142.4 3105.6
Hu Lu Ke - 742.8 ---------- 2019.1 5488.5
Hu Zhang (Jiang) - 411.6 ---- 1118.8 3041.3
Hua Jiao - 539.7 ---------- 1467 3987.8

Hua Rui Shi - 606.9 ---------- 1649.7 4484.4
Hua Shi - 242.7 ---------- 659.7 1793.3
Huai Hua - 779.1 ---------- 2117.8 5756.8
Huang Bai - 491.4 ---------- 1335.7 3630.9
Huang Jing - 849.6 ---------- 2309.4 6277.7
Huang Lian - 434.1 ---------- 1180 3207.5
Huang Qi - 773.1 ---------- 2101.5 5712.4
Huang Qin - 627.6 ---------- 1705.9 4637.3
Huo Ma Ren - 828.9 ---------- 2253.1 6124.7
Huo Xiang - 900 ---------- 2446.4 6650.1
Ji Li - 440.7 ---------- 1197.9 3256.3
Ji Xue Cao - 510 ---------- 1386.3 3768.4
Ji Xue Teng - 662.4 ---------- 1800.5 4894.5
(Bai) Jiang Can - 659.7 ---------- 1793.2 4874.5
Jiang Huang - 647.1 ---------- 1759 4781.4
Jiang Xiang - 616.8 ---------- 1676.6 4557.5
Jiao Gu Lan - 408.9 ---------- 1111.5 3021.3
Jie Geng - 521.1 ---------- 1416.4 3850.4
Jie Zi - 624 ---------- 1696.2 4610.7
Jin Yin Hua - 919.2 ---------- 2498.6 6792
Jin Ying Zi - 452.7 ---------- 1230.5 3345
Jin Zhan Ju - 861.3 ---------- 2341.2 6364.1
Jing Da Ji - 886.2 ---------- 2408.9 6548.1
Jing Jie - 462.3 ---------- 1256.6 3415.9
Jing Mi - 732.3 ---------- 1990.5 5411
Jiu Cai Zi - 613.8 ---------- 1668.4 4535.4
Ju Hong - 397.8 ---------- 1081.3 2939.3
Ju Hua - 632.4 ---------- 1719 4672.8
Ju Luo - 391.8 ---------- 1065 2895
Jue Ming Zi - 569.1 ---------- 1546.9 4205.1
Ku Ding Cha - 903.3 ---------- 2455.4 6674.5
Ku Fan - 258.2 ---------- 701.8 1907.8
Ku Shen - 715.5 ---------- 1944.9 5286.8
Ku Xing Ren - 548.7 ---------- 1491.5 4054.3
Kuan Dong Hua - 469.8 ----- 1277 3471.3
Kun Bu - 378.3 ---------- 1028.3 2795.2
Lai Fu Zi - 970.2 ---------- 2637.2 7168.8
Lang Du - 492 ---------- 1337.3 3635.4
Lei Gong Teng - 392.4 ------ 1066.6 2899.4
Li Zhi He - 443.4 ---------- 1205.2 3276.3
Lian Qiao - 793.2 ---------- 2156.1 5861
Lian Zi - 835.8 ---------- 2271.9 6175.7
Lian Zi Xin - 406.2 ---------- 1104.1 3001.4
Ling Zhi - 936.6 ---------- 2545.9 6920.5
Liu Huang - 313.8 ---------- 852.9 2318.6
Long Chi - 631.5 ---------- 1716.5 4666.1

Long Dan - 423.9 ---------- 1152.2 3132.2
Long Gu - 439.8 ---------- 1195.5 3249.7
Long Yan Rou - 987.9 ------- 2685.3 7299.6
Lu Dou - 752.7 ---------- 2046 5561.7
Lu Gen - 913.8 ---------- 2483.9 6752.1
Lu Hui - 612.9 ---------- 1666 4528.7
Lu Jiao (Rong) - 693.6 ---------- 1885.4 5125
Lu Lu Tong - 557.1 -------- 1514.3 4116.4
Lu Xian Cao - 876 ---------- 2381.2 6472.8
Luo Shi Teng - 975 ---------- 2650.3 7204.3
Luo Xuan Zao - 437.4 ------- 1188.9 3231.9
Lv Cha - 514.8 ---------- 1399.3 3803.8
Ma Chi Xian - 489.9 -------- 1331.6 3619.9
Ma Huang - 529.5 ---------- 1439.3 3912.5
Ma Qian Zi - 560.4 ---------- 1523.3 4140.8
Ma You - 840.3 ---------- 2284.1 6209
Mai Dong - 821.1 ---------- 2231.9 6067.1
Mai Ya - 471.6 ---------- 1281.9 3484.6
Man Jing Zi - 454.8 ---------- 1236.2 3360.5
Mang Xiao - 733.5 ---------- 1993.8 5419.8
Mao Dong Qing - 361.2 -------- 981.8 2668.9
Mi Cu - 163.2 ---------- 443.6 1205.8
Mi Meng Hua - 486.6 ---------- 1322.7 3595.5
Mi Tuo Seng - 239.5 ---------- 651 1769.6
Ming Fan - 942.6 ---------- 2562.2 6964.9
Mo Han Lian - 393.3 ---------- 1069.1 2906.1
Mo Yao - 479.4 ---------- 1303.1 3542.3
Mu Bie Zi - 527.7 ---------- 1434.4 3899.2
Mu Dan Pi - 478.8 ---------- 1301.5 3537.8
Mu Gua - 435.3 ---------- 1183.2 3216.4
Mu Li - 492.6 ---------- 1339 3639.8
Mu Li Rou - 734.1 ---------- 1995.4 5424.3
Mu Tong - 589.8 ---------- 1603.2 4358
Mu Xiang - 928.2 ---------- 2523.1 6858.5
Niu Bang Zi - 624.6 ---------- 1697.8 4615.2
Niu Huang - 375.9 ---------- 1021.8 2777.5
Niu Xi - 969 ---------- 2634 7160
Nv Zhen Zi - 839.1 ---------- 2280.9 6200.1
Ou Jie - 971.1 ---------- 2639.7 7175.5
Pei Lan - 798.9 ---------- 2171.6 5903.1
Pi Pa Ye - 540.6 ---------- 1469.5 3994.5
Pu Gong Ying - 780.6 ---------- 2121.8 5767.9
Pu Huang - 376.8 ---------- 1024.2 2784.1
Qian Hu - 621 ---------- 1688 4588.6
Qian Jin Ba - 835.2 ---------- 2270.3 6171.3
Qian Nian Jian - 490.2 -------- 1332.5 3622.1

Qian Niu Zi - 872.1 ---------- 2370.6 6444
Qiang Huo - 546.3 ---------- 1484.9 4036.6
Qin Jiao - 393.9 ---------- 1070.7 2910.5
Qing Ban Xia - 369.6 ---------- 1004.6 2730.9
Qing Dai - 377.4 ---------- 1025.8 2788.6
Qing Fen - 472.2 ---------- 1283.5 3489.1
Qing Feng Teng - 448.2 ----- 1218.3 3311.7
Qing Hao - 477.6 ---------- 1298.2 3529
Qing Meng Shi - 259.8 ------- 706.2 1918.6
Qing Pi - 972.4 ---------- 2643.2 7185.1
Qing Xiang Zi - 978.9 --------- 2660.9 7233.1
Qu Mai - 888.6 ---------- 2415.4 6565.9
Qu Qu Hua - 433.8 ---------- 1179.1 3205.3
Quan Xie - 762.6 ---------- 2072.9 5634.8
Ren Dong Teng - 510.9 ------- 1388.7 3775
Ren Shen - 537 ---------- 1459.7 3967.9
Ren Shen Ye - 788.7 ---------- 2143.9 5827.7
Rou Cong Rong - 582.3 -------- 1582.8 4302.6
Rou Gui - 746.1 ---------- 2029.1 5512.9
Ru Xiang - 769.2 ---------- 2090.9 5683.6
San Bai Bang - 897.3 ------- 2439.1 6630.2
San Leng - 614.4 ---------- 1670.1 4539.8
San Qi - 438.9 ---------- 1193 3243
Sang Bai Pi - 961.8 ---------- 2614.4 7106.7
Sang Ji Sheng - 924.3 -------- 2512.5 6829.7
Sang Shen - 503.1 ---------- 1367.5 3717.4
Sang Ye - 458.4 ---------- 1246 3387.1
Sang Zhi - 674.7 ---------- 1834 4985.4
Sha Ren - 485.7 ---------- 1320.2 3588.8
Sha Shen - 186 ---------- 505.6 1374.3
Shan Jin Che - 306.6 ---------- 833.4 2265.4
Shan Yao - 371.4 ---------- 1009.5 2744.2
Shan Zha - 429 ---------- 1166.1 3169.9
Shan Zhu Yu - 909.9 ---------- 2473.3 6723.3
She Chuang Zi - 533.4 ---------- 1449.9 3941.3
She Gan - 565.8 ---------- 1538 4180.7
She Xiang - 388.5 ---------- 1056 2870.6
Shen Jin Cao - 386.4 ---------- 1050.3 2855.1
Shen Qu - 381.6 ---------- 1037.2 2819.6
Sheng Di Huang - 541.8 ---------- 1472.7 4003.3
Sheng Jiang - 720.3 ---------- 1957.9 5322.3
Sheng Ma - 859.2 ---------- 2335.5 6348.6
Shi Chang Pu - 867.6 ---------- 2358.3 6410.7
Shi Gao - 186.9 ---------- 508 1381
Shi Hu - 756.6 ---------- 2056.6 5590.5
Shi Liu Pi - 602.4 ---------- 1637.4 4451.1

Shi Wei - 711.9 ---------- 1935.1 5260.2
Shu Di Huang - 447 ---------- 1215 3302.9
Shui - 361.8 ---------- 983.4 2673.3
Shui Zhi (Gardenia) - 406.8 ----- 1105.7 3005.8
Shui Zhi (Leech) - 943.2 ------- 2563.8 6969.3
Song Xiang - 599.1 ---------- 1628.5 4426.7
Su Mu - 639.6 ---------- 1738.6 4726
Suan Zao Ren - 591.3 ---------- 1607.3 4369.1
Suo Yang - 384.6 ---------- 1045.4 2841.8
Tai Zi Shen - 933 ---------- 2536.1 6893.9
Tao Ren - 477 ---------- 1296.6 3524.5
Tian Dong - 637.8 ---------- 1733.7 4712.7
Tian Hu Sui - 465.9 ---------- 1266.4 3442.5
Tian Hua Fen - 655.8 ---------- 1782.6 4845.7
Tian Ma - 594.9 ---------- 1617.1 4395.7
Tian Men Dong - 771.3 -------- 2096.6 5699.1
Tian Nan Xing - 418.5 ---------- 1137.6 3092.3
Ting Li Zi - 425.7 ---------- 1157.1 3145.5
Tong Cao - 984.9 ---------- 2677.2 7277.4
Tou Gu Cao - 881.7 ---------- 2396.7 6514.9
Tu Bie Chong - 852 ---------- 2315.9 6295.4
Tu Fu Ling - 520.5 ---------- 1414.8 3846
Tu Si Zi - 957 ---------- 2601.3 7071.3
Wa Song - 996.6 ---------- 2709 7363.9
Wang Bu Liu Xing - 511.8 ------ 1391.2 3781.7
Wei Ling Xian - 722.7 ---------- 1964.5 5340
Wu Bei Zi - 642.3 ---------- 1745.9 4745.9
Wu Hua Guo - 413.7 -------- 1124.5 3056.8
Wu Jia Pi - 416.7 ---------- 1132.7 3079
Wu Ling Zhi - 383.7 ---------- 1043 2835.1
Wu Mei - 832.5 ---------- 2262.9 6151.9
Wu Wei Zi - 474 ---------- 1288.4 3502.4
Wu Yao - 441.9 ---------- 1201.2 3265.2
Wu Zhu Yu - 436.8 ---------- 1187.3 3227.5
Xi Jiao - 750.3 ---------- 2039.5 5544
Xi Xian Cao - 655.2 -------- 1781 4841.3
Xi Xin - 627 ---------- 1704.3 4632.9
Xi Yang Shen - 813.6 -------- 2211.5 6011.7
Xian He Cao - 877.8 ---------- 2386.1 6486.1
Xia Ku Cao - 407.1 ---------- 1106.6 3008
Xian Mao - 524.1 ---------- 1424.6 3872.6
Xiang Cha Cai - 504.9 --------- 1372.4 3730.7
Xiang Fu - 814.8 ---------- 2214.8 6020.6
Xiang Jia Pi - 908.7 ---------- 2470.1 6714.4
Xiang Mao - 754.5 ---------- 2050.9 5575
Xiang Ru - 555.9 ---------- 1511 4107.5

Xiao Hui Xiang - 676.8 -------- 1839.7 5000.9
Xiao Ji - 463.5 ---------- 1259.9 3424.8
Xiao Mai - 636.3 ---------- 1729.6 4701.6
Xie Bai - 470.7 ---------- 1279.4 3478
Xin Yi - 584.7 ---------- 1589.3 4320.3
Xing Ren - 580.2 ---------- 1577.1 4287.1
Xiong Huang - 678 ---------- 1842.9 5009.7
Xu Chang Qing - 484.2 ------ 1316.1 3577.7
Xu Duan - 814.2 ---------- 2213.2 6016.1
Xuan Fu Hua - 453.6 ---------- 1233 3351.6
Xuan Shen - 959.4 ---------- 2607.9 7089
Xue Jie - 795.9 ---------- 2163.4 5880.9
Ya Ma Zi - 818.4 ---------- 2224.6 6047.2
Ya Dan Zi - 653.7 ---------- 1776.9 4830.2
Yan Hu Suo - 385.2 ---------- 1047 2846.2
Ye Ju Hua - 857.4 ---------- 2330.6 6335.3
Yi Mu Cao - 707.4 ---------- 1922.9 5227
Yi Tang - 828.3 ---------- 2251.5 6120.3
Yi Yi Ren - 588 ---------- 1598.3 4344.7
Yi Zhi - 402.9 ---------- 1095.1 2977
Yin Chen - 431.4 ---------- 1172.6 3187.6
Yin Yang Huo - 726 ---------- 1973.4 5364.4
Yu Jin - 772.2 ---------- 2099 5705.8
Yu Xing Cao - 935.4 ---------- 2542.6 6911.7
Yu Zhu - 396 ---------- 1076.4 2926
Yuan Zhi - 844.5 ---------- 2295.5 6240
Zao Fan - 456 ---------- 1239.5 3369.4
Zao Jiao Ci - 372.9 --------- 1013.6 2755.3
Zao Xiu - 681 ---------- 1851.1 5031.9
Ze Lan - 696.6 ---------- 1893.5 5147.2
Ze Xie - 947.1 ---------- 2574.4 6998.1
Zhang Nao - 609.6 ---------- 1657 4504.3
Zhe Bei Mu - 668.7 ---------- 1817.7 4941
Zhen Zhu - 507 ---------- 1378.1 3746.2
Zhi Ke - 992.7 ---------- 2698.4 7335.1
Zhi Ma Qian Zi - 417.9 ----- 1135.9 3087.8
Zhi Qiao - 475.8 ---------- 1293.3 3515.7
Zhi Mu - 651.6 ---------- 1771.2 4814.7
Zhi Shi - 480.9 ---------- 1307.2 3553.4
Zhi Zi - 705.6 ---------- 1918 5213.7
Zhu Ling - 473.1 ---------- 1286 3495.7
Zhu Ru - 482.4 ---------- 1311.3 3564.4
Zhu Sha - 232.8 ---------- 632.8 1720.1
Zi Cao - 944.7 ---------- 2567.9 6980.4
Zi Hua Di Ding - 445.2 -------- 1210.1 3289.6
Zi Ran Tong - 172.8 ---------- 469.7 1276.8

Zi Su Geng - 570.3 ---------- 1550.2 4213.9
Zi Su Ye - 550.8 ---------- 1497.2 4069.8
Zi Su Zi - 525.3 ---------- 1427.9 3881.4
Zi Wan - 640.8 ---------- 1741.8 4734.9
Zong Lv - 834.6 ---------- 2268.6 6166.3

Nutritional Flavonoids - 404.7 ---------- 1100 2990.3

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Ai Ye - 256.25 264.4 268.5 270.24 272.25 276.4 278.34 279.4 280.45 284.5 286.24 296.53 298.55 299.36 300.26 302.23 304.34 308.5 310.51 314.29 318.24 328.3 330.29 340.63 342.4 344.32 354.3 358.34 360.31 362.5 412.7 414.7 424.7 426.72 438.81 442.8 464.38 468.75 472.74 482.8 486.68 516.45 610.52 620.7
Ai Ye - 15874.62 --- 790.5

An Ye - 252.1 256.42 266.1 278.43 279.4 284.5 288.06 308.4 326.3 386.5 454.6 462.36 472.6 486.26 490.29 492.86 504.4 630.9 698.8 An Ye - 7847.65 --- 390.9

Ba Dou - 248.27 251.22 254.24 256.42 270.24 274.27 278.43 280.4 282.46 283.24 284.5 294.47 300.26 302.5 308.5 312.53 314.38 316.35 332.43 334.45 338.57 340.6 346.46 348.43 354.31 364.43 372.4 378.46 390.34 364.43 378.46 414.71 432.55 436.4 458.41 476.56 488.5 489 504 516.6 531 544.72 560.72 562.77 564.49 570.71 572.73 582.51 586.94 588.8 600.78 602.8 616.92 628.93 630.85 644.88 667 668.9 709 891.5 1034.2 Ba Dou - 27334.33--- 500.7

Ba Ji Tian - 220.35 222.24 224.42 228.37 236.22 238.24 240.5 242.4 246.43 248.27 254.49 258.25 266.25 268.5 270.24 278.34 280.4 282.5 284.5 286.25 298.31 300.26 310.51 312.53 314.29 328.34 330.33 332.34 342.3 346.34 368.64 372.4 378.36 390.6 406.38 410.72 412.72 414.36 414.79 420.4 432.4 456.88 488.7 494.49 496.96 504 544.64 562.77 564.49 582.51 667 822.8 828.72 1034.2 1063 Ba Ji Tian - 21825.64 --- 399.9

Ba Qia - 180.16 228.24 244.24 270.24 286.2 288.25 302.23 354.35 358.38 370.35 418.44 434.39 448.4 456.71 1049.2
Ba Qia - 5689.78 --- 770

Bai Bian Dou - 266.38 268.26 275.26 280.45 282.46 284.5 286.24 290.27 298.5 302.23 312.53 316.26 318.49 324.4 334.5 340.6 342.47 344.54 346.5 362.42 376.36 382.7 392.54 408.79 410.8 412.7 414.71 418.35 424.8 452.4 458.4 464.38 484.4 488.73 500.45 504 536.87 538.46 550.68 552.48 558.49 566.51 582.5 610.57 667 692.79 761.38 831.9 1034.2 Bai Bian Dou - 21655.6 --- 396.6

Bai Bu - 198.17 212.24 214.26 223.3 226.27 228.29 230.26 242.24 253.29 256.47 258.31 267.32 268.26 274.31 275.26 277.4 280.4 283.24 286.32 288.33 291.4 293.4 296.6 297.35 300.35 305.37 307.4 309.36 315.36 316.26 317.4 319.4 321.41 323.4 328.5 329.43 335.39 337.41 342.4 347.4 351.44 353.45 354.31 356.4 358.39 368.38 371.52 375.56 378.42 383.8 385.5 387.52 389.49 389.59 391.56 397.8 398.66 401.5 403.47 405.5 408 412.7 413.46 414.71 415.48 417.5 421.5 426.72 431.48 432.51 454.73 545.6 546.92 576.85 609.7 610.74 613.74 622.7 624.8 714.02 1465.7 Bai Bu - 30560.75 --- 559.8

Bai Fu Zi - 190.2 192.26 206.28 219.28 238.24 240.5 244.2 280.4 282.55 286.41 308.5 310.6 321.21 337.3 380.73 412.7 450.9 456.7 457 470.76 550.68 564.5 568.9 576.85 610.52 618.8 626.52 786.7 879.38 1747.09 2713.23 Bai Fu Zi - 16529.89 --- 822.9

Bai Guo Ren - 254.41 256.42 266.4 268.26 270.24 275.26 278.34 280.45 282.5 284.5 286.24 290.27 296.53 298.5 300.26 301.28 302.23 304.5 305.41 306.27 316.26 318.49 320.47 321.21 322.5 324.4 326.1 330.29 334.5 336.47 342.47 344.54 346.5 348.52 354.35 362.42 374.56 376.36 382.7 392.54 408.79 410.8 412.7 414.71 418.35 424.8 432.38 448.4 452.4 457 458.4 460.82 462.4 464.38 470.76 481 484.4 485 488.73 500.45 506.7 536.87 538.46 550.68 552.48 561 566.51 568.87 576.85 580.54 582.5 610.57 624.54 692.79 761.38 788.6 831.9 940.7 Bai Guo Ren - 32992.53 --- 604.2

Bai He - 268.26 270.28 273.38 280.28 282.56 284.27 286.24 288.25 298.55 300.31 302.5 318.24 326.56 344.32 354.31 385.42 386.32 388.3 399.44 400.38 412.7 413.65 414.72 430.63 432.71 442.41 448.41 454.76 458.41 460.39 462.4 476.39 485 494.93 547.56 554.54 574.84 576.86 592.85 610.52 678.7 722 725 757.66 855.14 869 883 884.19 885.17 887.19 901.17 903.19 941.24 1045.31 1063.33 1192.3
Bai He - 30376.44 --- 566.4

Bai Ji - 268.31 270.32 272.37 284.26 298.3 318.32 346.13 348.42 358.3 360.44 364.43 392.4 398.4 402.43 428.56 452.53 454.5 456.57 462.53 466.57 470.55 478.52 480.51 482.52 492.52 494.17 496.46 520.6 538.16 550.56 562.6 584.57 586.6 588.65 636.5 661 692.7 940.7 Bai Ji - 17661.98 --- 879.3

Bai Ji Li - 182.22 194.06 198.22 212.25 247.98 248.4 264.28 313.13 327.3 390.51 431 440.5 492.6 624.7 638.7 708.87 754.9 869.04 887.05 903.05 911 917.04 919.19 927.12 935.86 1035.2 1049.2 1051.2 1065.2 1077.3 1261.4 1545.66 Bai Ji Li - 22024.13 --- 403.5

Bai Jie Zi - 284.1 286.1 288.25 290.1 302.23 316.1 318 332.26 370 414.39 423.5 425.4 430.38 432.11 490.22 800.83 Bai Jie Zi - 6203.97 --- 839.7

Bai Lian - 116 135.1 137.1 138.1 150.1 154.1 162.1 170.1 182.2 184.1 191.6 216.3 222.3 228.2 230.3 234.3 244.2 248.2 254.2 262.3 267.2 270.2 284.2 290.2 293.4 300.3 302.2 320.2 321.2 322.2 323.3 330.4 332.3 333.3 334.3 335.3 336.4 337 347.3 353.3 3

58.3 360.4 362.4 365.4 369.4 370.6 378.4 381.4 392.5 396.6 402.7 408.8 412.7 414.7 4
24.8 426.7 430.6 442.4 448.4 452.8 456.7 458.3 470.7 472.7 493 534.6 562.6 576.8 58
1.7 584.8 636.4 708.4 720.7 788.6 802.6 940.6 Bai Lian - 27984.3 --- 512.5

Bai Qian - 188.22 196.39 198.39 208.25 222.37 226.44 240.5 254.49 277.4 282.55
284.5 296.57 310.6 317.4 324.63 330.4 338.65 351.4 352.7 353.45 358.12 360.44 365.
42 365.42 371.5 374.12 375.5 389.54 392.4 414.7 417 418.4 426.7 520.6 520.61 550.6
8 564.62 576.85 586.17 602.54 650.8 748.9 776.9 779 794.92 808.95 808.95 839 937.1
957.1 957.1 Bai Qian - 23377.13 --- 428.1

Bai Shao - 200.26 204.35 206.32 210.4 214.39 226.35 228.37 230.26 240.5 241.21
242.44 244.29 246.26 250.29 252.48 256.47 264.32 266.3 268.5 270.5 271.7 278.34 28
2.55 284.5 286.28 287.49 290.27 292.4 294.5 296.57 300.3 304.3 306.27 307.47 312.5
3 314.46 316.31 318.35 328.45 332.26 334.3 342.3 343 344.27 345.1 346.5 354.31 358.
5 360.12 362.37 366.5 367.6 372.45 386.43 394.76 408.4 414.7 440.74 446.5 448.38 4
50.9 452.6 454.76 456.7 457 462.4 470.76 480.51 482.35 496.46 534.5 550.68 572.6 5
76.85 584.57 586.94 590.6 602.6 610.52 625.6 628.8 632.6 634.45 636.5 650.6 661 78
3 784.54 785 786.56 788.62 936.65 938.66 939 940.7 950.67 1707.2 Bai Shao - 429
91.24 --- 787.5

Bai Tu Ling - 44.05 106.17 128.21 130.18 144.21 158.24 200.32 Bai Tu Ling - 91
1.38 --- 911.4

Bai Wei - 226.35 242.4 282.46 284.5 290.4 292.41 298.5 310.51 312.53 330.46 335.
44 337.5 344.49 346.5 360.49 362.46 364.43 374.47 376.49 392.49 418.4 466.74 468.7
5 474.7 520.68 564.62 576.85 650.8 664.87 749 763 765 775 776.9 777.1 779 781 791
793.1 795 797 809.1 811 825.1 839 907.1 925.19 927.16 937.1 939.22 941.19 953.2 95
5.22 957.19 971.22 985.25 987.22 1073.32
Bai Wei - 36357.57 --- 666

Bai Xian Pi - 226.4 229.23 232.27 199.21 236.31 259.26 260.29 262.33 278.33 284.
26 286.24 302.23 303.35 316.5 318.49 324.28 347.5 362.37 374.4 400.68 404 406 414.
7 416.52 418.44 424.49 432.5 434.5 440.4 450.5 455 460.63 464.62 468.69 470.5 472.
53 480.62 484.5 486.5 499 502.72 532.84 558.68 560.74 562.92 576.85 594.65 596.7 6
17 629.7 720.71 Bai Xian Pi - 21242.08 --- 389.1

Bai Zhi - 260.37 264.45 266.5 267.24 268.48 270.5 272.38 278.38 280.5 282.5 284.
5 286.3 287.4 292.4 294.47 296.57 298.5 300.3 304.29 307.47 308.5 310.51 314.55 31
6.31 318.32 322.5 324.28 326.56 334.3 335.4 337.5 338.65 339.47 340.58 342.3 346.5
348.35 352.7 354.7 366.71 367.6 368.38 380.73 386.65 390.56 408.4 410.72 412.7 424.
7 432.42 452.59 462.4 468.4 478 534.5 572.6 576.85 586.94 590.6 602.95 628.8 632.6
650.6 940.7 1253.35 1654.4 1988.29 Bai Zhi - 29399.62 --- 538.5

Bai Zhu - 278.35 280.45 282.46 286.24 290.4 302.19 308.33 309.36 314.4 316.4 31
7.4 335.4 351.44 356.41 358.43 368.4 371.5 375.5 378.42 384.42 387.52 389.59 405.5
412.7 414.72 417.5 426.73 428.74 432.51 448.38 454.74 462.68 464.38 468.8 562.92 5

76.85 592.7 594.71 595.8 613.75 624.8 685 767
Bai Zhu - 18193.92 --- 906

Bai Zi Ren - 200.32 210.27 222.37 228.37 242.4 260.29 280.4 282.46 284.5 286.45 290.4 292.4 294.5 296.5 298.5 304.5 306.48 308.5 310.5 312.53 324.5 326.56 340.6 346.5 353.4 360.32 362.46 368.64 414.71 538.46 576.85 718.66 746.72 Bai Zi Ren - 11291.02 --- 562.2

Ban Lan Gen 281.48 284.5 285.3 292.37 294.47 295.3 296.5 297.3 300.36 302.23 306.36 309.27 312.5 318.45 322.6 324.28 326.35 327.37 330.5 334.36 337.58 338.65 342.3 344.3 350.4 354.3 359.38 360.44 363.4 365.42 366.71 370.4 372.4 379.35 381.35 386.65 388.5 390.56 397.5 398.4 399.48 400.68 402.4 404 406.43 408.4 412.7 414.8 418.35 419.42 424.4 425.43 426.7 432.4 442.7 448.81 464.38 478.5 522.6 527.6 539 548.74 553 554.5 568.9 576.85 592.5 597.13 610.56 618.74 675 684.68 704.7 Ban Lan Gen - 29994.32 --- 549.3

Ban Xia - 267.24 268.23 276.37 278.34 280.4 282.55 283.24 284.52 294.39 296.65 297.33 298.55 302.23 308.56 310.5 316.26 323.39 324.51 328.5 330.5 332.38 340.6 342.34 344.6 353.41 354.3 358.3 360.4 400.68 412.7 414.7 426.7 428.6 432.64 446.36 448.4 460.39 478.4 484.36 506.5 522.6 545.6 546.92 552 576.85 616.5 624.77 708.4 714 807.3 1465.7 Ban Xia - 21759.66 --- 398.7

Ban Zhi Lian - 268.5 270.28 272.25 282.55 284.5 286.28 288.25 296.6 298.31 300.26 302.28 314.31 316.3 328.32 330.3 334.4 344.32 354.31 358.3 374.3 380.72 386.65 388.3 394.75 396.72 400.68 412.7 432.38 446.36 448.41 454.73 456.7 462.4 464.4 468.75 476.39 480.6 504 557.6 558.6 574.7 576.85 580.53 610.56 638.63 667
Ban Zhi Lian - 18825.03 --- 937.2

Bei Dou Gen - 193.24 204.35 214.21 248.36 264.36 290.48 291.3 297.35 305.28 307.3 313.3 321.33 325.36 327.37 329.39 337.33 342.41 343.5 351.35 356.44 382 384 396 398 426.5 437.57 443 457 449.54 458.72 472.7 488.7 497.62 576.85 593.8 596.71 610.81 616 618.8 622.75 624.77 629.74 632 646 647.71 656.76 820.83 1701.2 Bei Dou Gen - 22250.09 --- 407.7

Bei Sha Shen - 228.37 232.32 236.26 244.2 246.26 248.27 252.26 256.42 260.37 267.24 270.28 278.43 280.45 282.46 284.48 286.28 296.53 297.33 298.5 300.3 302.24 304.29 305.41 324.28 332.39 334.32 338.4 342.34 354.35 360.36 362.42 364.3 366.4 372.37 388.45 398.36 402.39 408.4 410.4 414.7 424.4 448.42 464.38 474.46 523.62 524.56 538.54 552.52 554.54 610.52 639.8 640.6 674.7 704.71 2049.11
Bei Sha Shen - 22358.46 --- 409.5

Bi Xie - 186.2 233.35 256.25 258.27 270.24 292.33 310.34 396.7 412.7 414.71 456.73 502.39 560.9 574.83 606.7 653.15 722.9 738.9 853.91 855 869 885 911 1049.2 1065.2 1077.3 Bi Xie - 15413.2 --- 767.4

Bian Dou Hua - 251.22 256.26 265.19 270.24 286.24 287.24 288.26 432.38 448.4 5

04.4 578.52 578.53 592.55 610.52 627.6 667 683.71 3291.6 Bian Dou Hua - 10919.8 6 --- 543.6

Bian Xu - 264.36 278.4 282.5 284.5 286.28 302.28 304.25 308.5 316.26 317.27 318. 23 332.38 348.43 354.31 356.4 360.31 368.64 384.3 412.7 418.35 432.64 434.35 442.7 2 448.4 456.7 458.72 463.4 464.38 470.76 472.7 478.4 484.36 498.5 506.54 578.52 58 6.94 600.52 610.5 616.5 624.54 634.94 742.72 781 813.15 891.5 927.12 945.1 1089.3 1107.2 Bian Xu - 24660.77 --- 451.8

Bie Jia - 280.45 282.5 284.5 286.5 310.5 413.6 416.6 1064.19 Bie Jia - 3609.29 --- 488.4

Bing Lang - 204.35 214.34 220.35 222.24 226.36 228.37 234.33 242.4 254.41 256. 42 278.34 280.45 282.46 284.5 287.2 290.27 296.57 301.34 302.45 306.27 310.6 312.5 3 334.45 336.3 340.6 342.3 368.64 370.6 390.56 410.72 446.49 452.4 458.37 478 576. 5 578.52 586.94 592.7 624.54 817 866.8 891.5 1155 1701.2
Bing Lang - 18728.31 --- 932.4

Bing Pian - 190.32 196.29 204.36 214.21 220.36 232.41 238.42 270.24 288.3 290.4 8 318.33 328.32 352.41 396 414.72 416.47 426.5 442.73 443.63 446.36 447.51 457 45 8.73 460.43 462.45 472.71 478.41 480.47 488.71 496.47 576.86 584.57 594.71 608.55 610.52 618.8 625.56 632.57 661 820.83 931.12 1335.45
Bing Pian - 19634.29 --- 977.7

Bo He - 272.25 280.45 284.5 286.24 288.25 296.5 300.26 306.27 353.4 358.32 360. 32 388.4 434.39 436.8 448.4 452.4 457 538.49 544.63 576.85 578.52 586.94 592.55 59 4.56 596.53 608.5 611 718.66 732.69 746.72 817 866.8 891.5 1155 Bo He - 17761.0 9 --- 884.4

Bu Gu Zhi - 216.19 228.37 234.25 256.38 272.38 280.45 282.25 284.5 298.29 303.2 4 320.34 322.4 324.4 334.32 336.34 338.4 340.58 352.34 368.34 412.7 422.81 448.38 576.85 581.5 616.75
Bu Gu Zhi - 8752.75 --- 435.9

Can Sha - 250.29 254.36 266.41 275.26 278.52 280.3 282.4 296.53 299.4 300.26 3 02.32 308.42 311.33 312.53 316.26 318.32 326.3 330.29 372.45 386.65 396.65 400.42 413.4 416.4 426.72 440.7 441.4 442.5 454.4 480.63 486.47 488.44 530.57 536.87 564. 58 568.87 603 606.66 610.7 611.8 692.7 871.2 882.9 885.18 889.35
Can Sha - 20211.11 --- 370.2

Cang Er Zi - 240.5 242.4 246.3 248.32 254.24 268.5 270.5 278.43 280.45 282.55 2 84.52 294.5 296.57 298.55 302.23 306.35 312.53 340.6 342.3 354.35 356.4 358.3 368. 3 372.37 382.71 386.35 404.4 410.7 412.7 414.71 428.6 430.4 432.64 516.49 545 552. 87 574.83 576.85 581 611 624.6 678.6 742.72 770.8 803 880.3 Cang Er Zi - 19361. 33 --- 963.9

Cang Zhu - 267.24 274.35 276.37 278.34 280.45 282.46 284.5 286.24 306.35 308.3 3 316.4 318.32 324.33 354.61 359.55 372.41 398.49 400.51 402.4 412.77 414.79 416.5 1 418.59 432.51 446.49 448.5 450.52 458.46 460.43 462 470.51 480.51 486.42 496.46 504.7 546.6 562.65 576.85 578.65 584.57 610.65 632.57 652.7 661 694.8 1009.14 C ang Zhu - 20462 --- 374.7

Cao Dou Kou - 200.32 204.39 208.25 210.31 220.35 222.38 227.36 254.24 256.42 262.4 264.4 266.41 270.28 272.25 278.35 282.46 290.27 296.5 298.5 300.26 414.71 42 8.65 476.56 610.52 616.83

Cao Guo - 110.11 126.11 134.22 136.23 138.12 142.24 152.23 154.25 156.27 162. 18 166.24 168.28 170.25 172.26 178.18 196.29 200.32 202.25 208.25 222.37 278.43 2 80.45 290.27 294.3 302.24 311.33 316.43 324.4 354.4 368.4 414.79 416.72 426.72 463. 4 464.4 576.85 610.52 611 Cao Guo - 10401.7 --- 517.8

Cao Dou Kou - 7633.37 --- 380.1

Cao Wu - 169.22 174.11 184.28 195.26 242.4 289.33 294.47 322.22 327.4 330.29 3 43.5 357.49 359.5 377.52 437.57 449.54 476.39 478 480.6 481 497.62 532.5 573.7 603. 7 606.66 616 629.74 632 636.56 643.76 645.74 646 647.71 659.76 673.79 687.77 1701. 2 Cao Wu - 18404.3 --- 916.2

Ce Bai Ye - 280.45 282.46 284.5 286.24 288.47 290.48 294.47 296.5 302.5 304.47 306.48 312.5 314.25 316.43 318.24 320.5 332.43 346.5 348.43 354.61 370.6 390.56 39 8.44 414.71 424.8 447.37 448.4 463.4 464.38 470.8 502.7 538.5 545 566.51 574.62 59 6.8 600.52 627.76 642.8 686.8 698.8 766.9 778.9
Ce Bai Ye - 18600.98 --- 926.1

Cha Ye - 250.38 262.3 288.25 290.27 300.26 306.4 311.4 326.34 330.29 332.26 34 2.3 344.32 354.31 374.6 398.7 430.7 432.64 434.4 442.4 448.38 450.7 456.7 458.4 464. 38 465.38 472.7 480.38 500.8 536.9 564.49 578.5 599.7 611.53 614.5 620.6 724.15 74 6.62 914.7 952.64 953 1147.3 1233.3
Cha Ye - 21548.27 --- 394.8

Chai Hu - 254.49 255.44 256.42 262.4 264.36 267.24 268.5 270.24 278.43 280.4 28 2.55 284.5 286.28 294.5 296.57 302.23 305.41 308.5 312.5 314.29 316.5 317.27 330.2 9 342.3 348.43 356.4 360.31 368.64 384.33 394.76 412.7 414.7 416.4 424.79 426.72 4 32.42 442.72 446.36 456.78 457 458.8 460.77 463.4 464.38 470.7 472.78 485 488.83 4 98.5 504.83 574.83 578.57 586.94 610.52 616.48 624.54 634.94 765 781 795 797 813. 15 823.14 825.16 865.18 869 891.5 927.12 929.1 940.68 943.26 945.1 954.66 959.2 10 89.3 1107.24 1269.38 Chai Hu - 40780.05 --- 747

Chan Tui - 195.21 204.38 252.22 265.18 276.33 334.45 348.4 350.45 358.3 384.42 3 86.44 480.6 481 496.6 627.6 2781.3 3291.6 Chan Tui - 11514.48 --- 573.3

Chao Shen Qu - 580.53 611 Chao Shen Qu - 1191.53 --- 438.3

Che Qian Cao - 264.28 267.32 268.5 270.5 276.33 278.4 279.4 280.45 282.46 284.5 286.5 294.47 300.26 302.24 303.35 306.48 312.5 316.26 326.47 342.3 346.33 350.4 354.31 360.36 362.33 382.28 388.4 400.68 412.7 414.71 436.8 441.4 446.36 448.4 450.44 457 464.38 478.45 492.52 504.44 508.4 524.57 568.5 586.94 622.57 624.6 625 630.7 638.61 641 651.23 652.64 656.59 667 686.7 784.75 1356.4 2122.51
Che Qian Cao - 27784.37 --- 508.8

Che Qian Zi - 226.25 256.42 270.24 278.43 282.34 284.48 300.26 302.24 342.3 346.33 348.35 362.33 374.34 388.4 412.69 414.7 416.72 436.84 448.38 457 462.4 464.38 466.39 470.76 476.52 478.45 504.44 576.85 622.57 624.6 638.61 641 651.1 652.64 656.59 666.58 668.64 784.84 869
Che Qian Zi - 18325.4 --- 912.3

Chen Pi - 194.19 196.29 200.32 202.33 204.35 206.32 210.18 212.41 214.34 217.65 218.33 222.24 226.35 232.4 234.2 238.24 256.42 272.25 275.25 278.34 284.5 296.57 312.32 314.29 328.32 342.34 344.32 358.34 360.31 372.37 374.34 388.37 402.4 404.4 412.7 414.71 418.39 426.72 432.64 455 456.49 470.51 482.44 514.56 536.9 552.87 581 594.5 611 623 624.6 1356.4 2781.3 Chen Pi - 22141.32 --- 405.6

Chen Xiang - 220.35 221.25 222.37 224.34 226.35 228.37 232.32 234.33 236.39 238.41 242.4 244.33 246.3 248.36 250.29 252.35 254.41 260.29 262.39 264.36 266.41 270.24 272.34 275.26 276.4 278.39 280.4 282.46 284.5 286.24 290.27 296.32 298.55 299.4 300.26 302.32 310.3 312.5 313.3 314.46 318.4 326.34 327.37 328.32 329.4 332.43 334.45 340.4 344.36 348.4 350.45 356.5 358.3 372.5 400.42 413.42 416.4 440.7 442.5 448.64 454.4 460.43 462.4 474.41 480.6 486.47 490.46 492.4 496.6 512.6 516.49 520.53 530.57 536.53 546.92 563.1 564.58 566.6 576.85 582.6 594.5 596.62 606.66 610.5 611.8 624.77 692.7 742.8 862.7 882.9
Chen Xiang - 35091.47--- 642.9

Chi Shao - 262.26 270.24 272.25 280.4 281.48 282.55 284.5 286.24 290.27 294.47 295.29 296.57 301.27 302.35 304.25 306.27 309.27 310.6 318.35 324.63 332.44 334.4 338.65 342.3 358.5 366.71 368.64 372.41 376.36 390.43 400.68 412.7 414.71 424.7 426.72 428.73 442.7 446.49 448.47 457 458 460.43 462.45 464 470.76 478.5 480.51 494.54 496.56 527.5 576.85 584.57 585 600.6 610.52 633 634.45 636.5 661 785 788.6 939 940.7 992.7 1701.2 Chi Shao - 30220.19 --- 553.5

Chi Shi Zhi - 142.05 --- 142.2

Chi Xiao Dou - 162.27 177.22 178.34 224.3 228.24 234.4 260.27 290.29 306.29 316.26 338.35 442.8 444.77 452.45 458.8 472.78 486.76 578.56 742.72 767.1 781.1 783.07 797.1 811.1 943.26 973.24 1135.4
Chi Xiao Dou - 13787.24 --- 686.4

Chong Wei Zi - 240.5 244.2 249.26 254.24 256.25 258.27 260.28 262.4 268.5 270.24 272.25 278.4 282.55 284.5 286.5 290.27 296.57 310.3 311.33 314.46 316.26 320.4

324.63 326.34 332.5 347.75 360.31 382.32 394.37 408.4 416.4 420.4 432.4 442.4 444.
52 446.4 452.4 454.6 462.44 470.76 480.46 484.4 485.4 494.5 497 500.45 506.97 508.
5 510.5 516.5 524.5 538.5 552.87 568.5 608.55 610.5 614.5 636.5 696.81 730.67 800.6
848.8 862.74 882.7 934.8 936.6 1731.53 Chong Wei Zi - 31511.62 --- 577.2

Chu Shi Zi - 286.5 292.38 293.28 294.5 295.29 296.5 298.51 302.46 308.51 309.27
310.52 312.54 322.53 324.61 326.57 334.37 335.36 336.62 338.4 340.6 342.3 347.33 3
48.4 349.39 351.39 352.7 354.62 363.4 366.4 367.4 368.65 376.37 385.31 386.66 402.
66 412.7 414.72 418.53 424.99 426.73 430.44 438.48 442.73 448.48 478.5 506.46 527.
53 536.89 546.53 576.86 586.94 610.52 612.54 815.41 1009.14 1024.2 1037.2 1351.61
1701.21 Chu Shi Zi - 27501.64 --- 503.7

Chuan Bei Mu - 234.4 238.24 242.44 243.22 244.2 247.33 251.24 254.24 267.24 26
8.29 270.24 274.44 283.24 284.5 286.24 288.47 294.47 298.55 301.5 302.24 342.3 354.
61 357.4 359.55 388.4 390.56 397.64 408.4 411.6 412.39 413.64 414.71 415.7 416.38
426.72 427.62 429.71 431.7 432.64 442.72 445.71 447.6 448.38 456.7 460.7 479.65 48
6.7 492.95 526.62 534.7 573.76 574.83 576.85 591.87 600.9 868.19 899.1 1063.23 108
1.2 1215.3 1261.4 1423.5 Chuan Bei Mu - 28958.96 --- 530.4

Chuan Lian Zi - 264.32 267.32 268.22 280.45 282.55 284.5 294.5 297.35 302.23 3
08.5 310.3 311.42 318.32 327.37 336.4 337 342.4 353.37 356.4 376.36 388.4 412.7 41
4.7 432.51 438.81 442.7 446.4 452.8 454.7 457 464.38 469.63 471 472.7 502.7 520.74
530.74 532.65 545 550.68 562.66 574.62 576.85 586.94 609 610.5 642.8 686.8 696.6 6
98.8 726.85 738.86 766.9 768.78 778.9 785 796.98 800.83 808.96 891.5 913.23 929.23
943.12 981.17 1045.36 1207.3 1237.38 1356.4 Chuan Lian Zi - 38342.54 --- 702.3

Chuan Niu Xi - 270.24 302.23 312.27 334.41 362.46 416.4 432.38 457 472.78 480.
6 481 494.66 504.66 508.77 520.65 536.73 560.8 576.85 646.95 793.11 795.08 797.1 8
09.11 941.24 997.36 1103.4
Chuan Niu Xi - 14908.24 --- 742.2

Chuan Shan Long - 238.24 250.33 256.3 266.33 268.5 280.34 282.3 284.38 298.41
325.36 414.71 450.39 456.7 531 540.6 576.76 653.15 757 853.91 869 871 873.9 885 8
96.9 1063.23 1077.3 1079.23
Chuan Shan Long - 15600.27 --- 776.7

Chuan Wu - 270.5 271.31 282.55 284.5 289.33 294.5 296.57 298.5 300.31 310.6 31
8.55 324.98 326.6 338.35 342.6 350.3 356.4 357.49 372.4 377.5 384.38 390.6 410.7 41
2.7 414.79 421.57 424.7 426.7 428.7 436.8 438.51 444.52 453.6 462.4 468.8 469.63 47
8 479.6 546.6 574.83 576.85 586.94 588.9 589.67 616 632 646 647.71 677 678.63 742.
72 962.15 1801.6 Chuan Wu - 25078.14 --- 459.3

Chuan Xin Lian - 232.35 254.41 256.42 264.32 270.24 278.3 280.32 284.26 286.32
290.5 296.53 298.29 300.31 302.23 310.4 314.29 318.5 328.32 330.31 332.43 334.45 3
44.36 348.48 350.5 354.31 356.5 358.34 364.5 368.4 372.5 374.37 388.41 402.5 406.3
410.72 426.7 428.65 446.49 448.64 458.7 460.5 462.45 463.4 464.9 474.5 480.6 490.4

6 492.43 496.6 512.66 516.45 520.53 536.53 546.92 551 563.1 568.7 576.85 594.5 620.47 624.77 636.5 668.7 742.81 953 Chuan Xin Lian - 27592.2 --- 505.5

Chuan Xiong - 204.35 206.24 208.25 210.27 212.41 220.26 222.37 224.25 226.27 228.41 240.25 241.39 242.7 245.1 252.26 254.24 256.47 264.28 267.32 268.5 270.5 276.33 278.34 279.4 280.45 282.46 284.5 286.5 288.3 294.47 296.5 297.5 298.5 303.35 306.48 308.5 312.53 316.5 326.47 330.5 342.3 346.4 350.4 354.31 356.41 362.4 380.52 382.49 412.52 414.71 426.7 438.81 441.4 457 472.7 504.44 508.4 513.67 518.68 524.57 535 568.5 574.87 576.85 586.94 602.84 630.7 686.7 1356.4 2122.51
Chuan Xiong - 27363.81 --- 501.3

Ci Shi - 159.69 --- 159.6

Ci Wu Jia - 222.19 250.38 280.45 284.5 296.49 302.04 310.51 325.44 340.33 342.41 354.31 370.35 372.4 380.5 384.3 386.4 400.42 402.44 412.7 414.71 434.44 448.1 456.36 457.43 484.67 546.6 576.85 588.8 612.5 624.77 682.67 712.77 734.96 742.72 891.5 955.1 1043.19 1101.3 1205.38
Ci Wu Jia - 20133.38 --- 368.7

Cong Bai - 266.47 268.49 269.21 270.46 272.48 275.26 278.35 280.45 282.47 284.48 286.46 290.27 294.48 296.5 312.54 315.26 334.46 354.62 359.77 367.4 390.6 391.43 414.72 416.52 440.71 448.38 450.88 456.71 530.67 549 576.86 610.52 705.29 795.25 863.37 873.92 897 938.67 978.1 992.71 999.86
Cong Bai - 19681.05 --- 979.8

Cu - 106.19 108.14 109.13 118.17 124.14 128.17 134.1 135.19 136.19 150.22 152.15 180.16 192.12 342.3 404.5 Cu - 2520.87 --- 927.3

Cu San Leng (Ling) - 268.26 270.24 280.45 282.46 286.24 306.4 310.5 330.5 342.3 366.4 404.5 412.7 414.71 418.35 422.47 426.7 440.7 442.7 456.7 458.8 466.39 470.6 550.72 576.85 608.5 610.52 624.54 627.5 665.13 710.86 773.7 875.8 883.1 925.24 967.14 987.18 1001.1 1003.1 1045.21 1075.24 1135.36 1147.2 1149.2 1207.35 1353.68 1763.86 1801.6 Cu San Leng - 32348.75 --- 592.5

Da Fu Pi - 254.24 255.42 264.4 284.27 288.3 290.27 306.27 332.26 336.47 344.28 346.4 396.3 410.76 412.62 424.83 426.7 430.7 442.4 450.4 452.64 454.7 456.7 458.38 463.4 470.3 472.71 486.3 488.71 498.39 504.78 576.51 578.53 586.81 588.83 594.53 602.81 604.83 611.5 634.85 651 680.83 748.95 764.95 767 780.7 786.6 793 802.6 919.1 936.65 981.18 1064.1 1104.75 1266.9 1269.43 1569.1 1701.2 1871.3
Da Fu Pi - 36742.84 --- 672.9

Da Huang - 249.26 254.24 256.25 258.27 266.33 270.24 272.25 284.26 286.24 290.27 298.31 300.28 310.3 314.46 316.26 320.4 326.34 327.4 332.5 340.6 354.31 360.36 378.37 382.32 390.38 394.37 406.38 408.4 416.4 418.39 420.41 422.58 432.4 442.4 446.4 448.41 452.41 454.6 462.44 470.76 478.45 480.46 484.4 485.4 494.5 497 500.45 508.5 510.5 516.5 518.38 524.5 536.4 538.5 542.53 552.87 562.92 568.5 570.54 576.85

578.52 580.53 594.52 608.55 610.52 614.51 636.51 696.81 730.67 740.66 756.7 770.7 3 800.6 807.3 822.93 848.8 862.74 882.73 934.8 936.6 1697.33 1731.53 Da Huang - 42929.69 --- 786.3

Da Ji - 286.24 290.48 292.41 294.47 296.83 298.29 300.44 302.28 312.5 314.29 3 16.26 318.32 320.4 326.56 330.29 354.31 362.46 364.43 366.45 372.4 386.48 390.6 41 2.7 414.71 426.72 428.69 434.39 457 462.4 466.9 468.8 498.5 516.45 550.6 576.85 59 2.63 608.5 618.8 623 634.45 654.7 698.75 712.74 756.79 783 936.65 939 952.64 954.6 6 992.7 1081.2 1120.75 Da Ji - 27257.36 --- 499.2

Da Qing Ye - 256.42 262.26 267.24 268.23 280.45 282.55 283.24 284.5 295.29 297. 3 302.28 304.5 306.36 308.5 309.27 312.4 326.39 327.37 340.38 342.3 350.37 351.39 360.4 363.37 366.4 370.4 372.4 381.35 384.38 396.6 414.71 418.35 424.7 426.7 432.7 1 438.53 442.7 448.5 462.4 470.76 477.6 478.5 527.58 528.53 581.7 586.94 612.53 89 1.5 1009.14 1351.61 1356.4 Da Qing Ye - 22436.38--- 411

Da Suan - 234.4 247.14 250.4 253.88 267.24 270.24 280.45 286.24 301.5 302.24 353.37 354.5 362.33 388.4 408.4 426.72 430.7 432.64 442.72 450.73 460.7 464.38 468. 8 486.7 534.7 600.9 917 1063.23 1081.2 1215.33 1261.53 1423.5 1691.5 Da Suan - 18413.71 --- 916.8

Da Zao - 256.42 264.32 265.35 267.32 268.22 270.45 278.43 280.45 281.35 282.5 283.24 284.5 290.27 291.3 295.4 297.35 300.26 302.23 310.3 311.42 312.53 313.35 32 7.37 329.21 336.4 337.3 340.58 342.41 345.2 353.37 354.3 367.6 368.64 376.36 378.3 8 384.64 386.44 412.7 414.7 416.38 426.7 430.79 432.51 442.72 446.4 452.7 454.7 45 7 464.38 469.63 470.7 472.78 478 485 486.68 488.75 500.67 514.74 532.65 534.72 53 6.87 548.75 550.68 562.66 564.75 575.7 576.85 578.52 586.94 594.6 597.8 609 610.52 611.77 618.84 627.8 632.96 647.8 665.8 682.26 695.8 696.6 710.72 723.2 729.9 754.6 9 785 796.98 808.96 816.76 885.4 891.5 913.26 929.23 943.12 981.17 1045.36 1207.3 5 1237.38 1355.4 1356.4 1701.2 Da Zao - 55267.41 --- 372.3

Dai Zhe Shi - 159.69 --- 159.6

Dan Dou Chi - 270.24 284.27 382.7 408.8 412.7 416.38 432.38 446.41 458.42 474.4 2 488.45 502.43 504.4 518.43 532.45 536.9 636.5 1701.2 Dan Dou Chi - 9407.48 --- 468.3

Dan Nan Xing - 208.25 457 Dan Nan Xing - 665.25 --- 665.4

Dan Shen - 272.32 276.3 278.32 280.4 282.5 284.5 286.5 287.24 290.48 292.37 29 4.34 296.57 298.4 300.44 302.45 306.35 308.5 309.33 310.4 312.4 314.42 316.48 328. 32 330.5 332.4 336.41 338.4 340.58 352.7 353.4 354.44 356.4 358.32 360.31 362.33 3 74.34 378.36 380.73 388.41 390.38 391.5 397.4 402.5 406.38 412.69 414.71 416.64 41 8.4 424.5 426.72 430.7 432.38 440.78 442.72 446.36 448.4 457 464.38 466.48 472.7 4 88.7 490.62 492.6 494.45 498.74 502.55 516.7 538.5 552.87 556.6 560.8 566.5 576.85 578.82 580.88 584.9 592.7 610.5 624.77 628.64 716.6 719 732.69 740.9 742.92 746.72

834.8 862.7 1701.2 1073.3
Dan Shen - 41439.6 --- 759

Dang Gui - 270.49 278.43 280.41 281.48 282.46 283.24 284.48 285.4 286.5 288.3 290.31 300.3 301.34 307.34 313.35 314.33 326.3 327.5 332.43 354.31 356.37 368.64 380.5 384.38 390.23 396.48 408.4 410.72 412.72 413.64 414.7 418.52 440.7 441.4 462.5 469.63 473.44 487.47 493.73 508.4 524.57 526.53 534.5 574.83 576.85 586.94 588.9 635.97 880.3 1355.4 1356.4 2122.51 Dang Gui - 24784.97 --- 453.9

Dang Shen - 194.19 196.37 198.18 200.32 202.34 204.35 208.21 210.4 212.41 216.32 228.37 232.32 241.39 240.5 242.4 246.34 248.32 250.38 254.49 256.47 264.32 266.29 267.32 268.52 270.5 280.4 282.55 284.5 286.24 293.4 294.5 296.57 298.5 300.31 302.24 305.41 310.6 312.5 316.26 318.24 320.48 322.5 324.98 326.6 330.29 334.41 338.35 342.6 350.3 356.4 372.4 382.7 384.38 388.37 390.6 396.43 402.48 410.7 412.7 414.79 424.7 426.72 428.7 430.7 434.35 436.8 438.51 442.72 448.4 462.4 464.38 468.8 469.63 478 480.38 485 546.6 559 574.83 576.85 578.97 586.94 588.9 608.7 610.56 618.7 622.7 631.7 665.13 677 678.63 726.7 742.72 767.1 830 959.2 962.15 1033 1801.6
Dang Shen - 41773.57 --- 765.3

Dan Zhu Ye - 180.16 354.31 426.7 432.38 440.74 448.38 548.66 Dan Zhu Ye - 2831.33 --- 383.1

Deng Xin Cao - 198.34 200.32 204.35 206.19 218.33 228.37 236.35 238.24 240.43 250.34 252.31 256.3 264.3 266.36 268.5 278.32 280.4 282.46 284.5 286.24 298.41 302.23 325.36 342.4 346.33 362.33 388.4 405.96 428.7 432.38 448.4 536.87 540.6 568.87 576.85 608.5 636.5 791 Deng Xin Cao - 13281.04 --- 661.2

Di Fu Zi - 204.36 208.26 228.38 254.41 256.43 270.46 271.32 278.43 280.45 282.47 284.5 289.33 296.54 300.26 302.23 308.51 312.54 316.26 330.29 340.6 368.65 412.7 414.63 438.83 440.71 457 478 480.6 481 573.68 576.85 589.68 603.71 616 629.75 632 632.92 646 687.78 764.95 767.1
Di Fu Zi - 17504.84 --- 871.5

Di Gu Pi - 270.24 280.45 282.46 283.32 284.5 289.4 294.43 296.44 300.44 301.34 308.5 313.35 324.63 354.31 380.73 386.65 396.4 400.68 412.7 418.39 430.4 444.52 448.38 452.8 464.89 470.68 512.68 531 536.87 564.49 568.87 576.85 592.5 610.5 624.54 636.5 822.93 840 873.91 896.94
Di Gu Pi - 18479.61 --- 920.1

Di Huang - 244.2 254.4 256.42 267.24 268.35 280.45 282.46 283.24 284.35 300.3 340.58 342.3 346.33 348.35 349.38 362.33 376.36 382.79 388.5 402.48 406.5 462.4 476.47 504.44 518.51 524.57 550.51 576.85 625 638.61 652.64 666.58 786.73 814.78 Di Huang - 14565.4 --- 725.1

Di Long - 103.12 139.58 168.15 186.21 355.38 Di Long --- 952.5

Di Yu - 266.29 270.28 286.24 290.27 300.26 302.23 306.27 330.29 332.26 344.27 3
46.4 360.31 364.4 396.3 410.76 426.7 432.38 442.4 448.38 449.38 452.63 454.68 456.
78 463.4 464.38 468.32 470.81 472.7 482.43 484.74 488.78 498.43 504.7 534.76 562.5
564.49 576.85 586.8 588.81 594.5 602.8 604.81 608.5 611.53 632.97 634.84 651 654.6
8 660.98 680.82 696.92 717 722.73 730.67 748.94 764.94 767 784.54 786.6 793 796 8
02.6 822 919.1 936.6 938.66 981.17 1104.75 1266.9 1569.1 1871.3 3740.53 Di Yu -
46881.54 --- 858.6

Ding Xiang - 250.38 252.26 254.49 262.4 264.31 270.5 271.7 278.34 279.4 282.55
284.48 286.24 290.48 296.57 300.26 302.23 308.6 310.6 312.5 316.26 318.35 322.6 32
4.63 326.39 338.65 352.7 370.6 386.48 390.56 400.68 412.7 425.6 432.38 434.39 448.
4 457 462.4 478.49 498.52 536.87 568.87 584.9 618.8 634.45 636.5 783 784.54 786.56
936.65 939 954.66 992.7 1081.2 Ding Xiang - 24094.77 --- 441.3

Dong Chong Xia Cao - 211.26 212.29 244.29 246.3 251.24 254.24 256.42 260.29 2
67.24 268.23 270.24 271.31 278.43 280.45 281.27 282.55 283.24 284.5 286.24 289.33
292.29 304.5 308.5 328.36 332.43 334.45 336.4 337.3 342.3 343.5 347.5 376.36 377.5
2 384.38 386.65 396.65 407.54 412.37 414.71 416.37 421.69 428.65 432.71 436.5 437.
57 449.54 453.64 465.6 467.6 469.6 470.68 479.61 481.6 485.6 493.71 497.62 499.6 5
04.4 507.6 568 571.7 573.67 581.7 583.79 586.94 599.7 601.73 602.89 603.7 616 625.
1 627.76 629.74 632 643.76 646 659.76 687.77 699.8 700.91 741.8 776.9 781 891.5 1
355.4 1356.4
Dong Chong Xia Cao - 39374.24 --- 721.2

Dong Gua Ren - 123.11 135.13 137.14 176.12 218.7 430.7 Dong Gua Ren - 122
0.9 --- 449.1

Dong Kui Zi - 279.4 342.3 692.7 Dong Kui Zi - 1314.4 --- 483.6

Dou Kou - 228.37 256.25 262.35 266.41 270.28 272.25 276.4 279.33 280.4 282.41
284.43 286.24 292.37 294.39 300.26 302.28 314.29 316.26 322.44 324.37 326.39 328.
4 348.5 350.5 356.41 358.3 360.44 374.43 378.5 386.44 388.51 414.7 432.64 457 490.
5 566.51 611 723.2 868.7 885.43 953 1085.43
Dou Kou - 17156.71 --- 854.1

Du Huo - 252.48 254.24 262.26 264.4 268.31 270.28 278.3 284.5 288.94 290.27 29
4.3 298.38 301.34 302.32 304.34 322.4 324.32 326.47 328.36 332.4 336.3 338.4 354.3
1 358.39 360.31 366.5 376.44 378.46 381.5 400.7 408.4 416.38 442.72 448.38 454.73
464.38 516.45 538.8 556.7 576.85 584.9 636.5 667.8 767.1 1085.43
Du Huo - 18065.44 --- 899.4

Du Yi Wei - 242.22 256.42 270.24 284.26 286.24 300.3 302.28 316.26 330.29 362.4
6 390.38 404.4 406.4 410.4 414.71 420.4 432.4 434.35 448.4 464.9 578.52 625 638.61
677 757 770.73 784.8
Du Yi Wei - 12009.37 --- 597.9

Du Zhong - 250.42 256.42 262.3 264.32 270.24 278.34 280.4 284.5 286.24 290.27 294.3 296.53 297.3 302.23 312.53 316.48 324.42 326.4 328.27 330.29 332.38 336.4 33 7 342.34 345.35 346.33 350.36 354.44 358.42 360.4 362.33 368.64 372.4 374.42 376.4 386.4 388.41 390.43 392.44 400.42 404.41 406.38 408.79 410.7 411.6 414.71 418.35 4 22.34 424.7 426.72 432.64 438.81 440.79 442.7 446.5 448.38 456.7 460.5 462.4 464.6 481 494.49 508.47 520.53 536.87 538.6 546.6 550.55 568.57 580.58 596.49 610.5 626. 52 669.67 682.74 698.74 700.76 712.77 742.72 820.83 908.89 968.94 Du Zhong - 35 836.46 --- 656.4

E Bu Shi Cao - 198.22 204.35 210.23 212.37 218.33 220.35 222.37 224.21 238.31 240.26 248.19 257.1 262.3 264.32 266.37 268.34 270.24 272.25 278.34 280.4 296.5 30 0.38 302.23 316.26 330.29 332.39 334.41 338.4 344.3 346.46 348.48 354.31 358.3 362. 51 364.48 382.7 400.68 402.4 410.7 412.7 414.71 426.72 442.72 444.52 460.77 468.75 474.8 485 490.8 492.43 502.81 504.78 518.81 545 574.83 576.85 581 606.93 611 622. 93 631.7 634.94 636.91 650.94 665.13 767.1 959.2 E Bu Shi Cao - 27087.81 --- 4 96.2

E Jiao - 146.19 174.2 218.7 E Jiao - 539.09 --- 539.1

E Zhu - 202.33 204.35 210.27 212.29 216.32 218.33 220.35 222.37 228.29 230.3 2 32.32 234.33 236.35 246.3 248.32 250.33 252.39 256.25 264.35 270.28 278.15 280.4 2 82.33 308.33 318.49 338.35 354.31 368.4 406.51 442.72 444.61 576.85 E Zhu - 905 5.87 --- 450.9

Er Cha - 178.2 200.36 264.3 274.27 284.28 286.3 288.26 290.29 302.3 304.25 314. 26 316.27 318.24 340.38 354.4 356.4 362.52 368.47 384.7 386.65 388.5 400.5 410.73 412.7 414.72 418.35 432.4 478.93 502.51 518.69 555.69 556.7 558.71 560.73 562.84 6 35 694.82 Er Cha - 14677.62 --- 730.8

Fa Ban Xia - 297.39 576.8 Fa Ban Xia - 874.19 --- 874.2

Fan Xie Ye - 256.42 270.24 278.43 279.4 282.46 284.5 286.24 290.27 316.3 352.7 3 94.4 408.4 410.72 412.7 414.71 416.68 418.4 432.4 446.4 448.38 460.5 462.4 464.6 48 1 510.5 516.5 524.5 538.5 568.5 608.55 820.83 834.8 848.76 862.74 934.8 Fan Xie Ye - 16537.63 --- 823.5

Fang Feng - 242.4 244.37 246.26 254.24 260.41 262.4 264.3 267.24 268.5 270.5 27 6.28 278.39 280.4 282.5 284.5 290.31 292.31 294.47 296.49 300.33 306.31 308.5 317 318.32 320.29 322.5 328.36 334.32 342.3 344.4 346.41 358.42 368.64 372.45 374.4 38 2.7 386.35 408.4 414.71 426.46 452.5 456.44 468.45 472 504.7 576.85 612.5 624.77 6 74.82 839.8 885 Fang Feng - 19105.67 --- 951.3

Fang Ji - 280.45 282.55 284.5 290.27 293.4 297.35 310.34 312.53 322.35 329.39 3 34.41 336.4 337 338.4 339.6 341.27 342.41 344.32 349.29 352.4 356.4 358.3 414.71 4 18.44 442.72 576.68 580.54 594.7 605.76 606.71 608.72 611 618.7 622.75 623.83 637. 78 638.75 721.71 Fang Ji - 16456.83 --- 819.3

Fen Ge - 254.24 416.4 Fen Ge - 670.64 --- 670.8

Feng Jiao - 254.37 256.4 268.26 270.28 272.29 274.35 283.31 284.31 286.5 290.5 296.36 298.29 300.4 302.5 304.4 306.44 314.3 316.4 318 320.5 330.29 334.45 336.5 348.6 354.4 368.38 370.4 386.52 388.5 408.5 418.35 422.5 434.44 452.5 476.47 492.6 502.7 518.7 548.7 562.7 602.8 742.72
Feng Jiao - 15619.88 --- 777.6

Feng Mi - 208.21 226.44 307.34 342.3 450.7 504.4 2122.51 Feng Mi - 4161.9 --- 563.4

Fo Shou - 200.32 204.39 206.41 208.3 212.41 222.37 228.37 236.22 256.42 260.28 280.4 282.46 300.26 308.5 330.5 352.64 358.3 360.31 382.32 410.72 412.39 426.72 507.75 608.54 611 795.9 822
Fo Shou - 9786.2 --- 487.2

Fu Ling (Yun Ling) - 254.49 256.25 267.32 276.28 278.34 279.4 280.45 282.55 284.5 290.27 302.19 310.39 312.53 314.5 324.4 325.36 332.26 337.58 339.6 342.3 344.3 356.37 359.28 371.4 390.6 396.65 412.69 414.79 428.6 434.35 440.7 454.7 456.7 468.75 470.76 472.4 482.7 485 487 499 500.75 512.75 514.7 526.75 529 576.85 581.7 586.94 588.81 604.82 620.47 730.75 791 801 808.96 862.7 940.7 947.15 954.66 1079.27 1085 1086.7 1109.3 1211.3 Fu Ling (Yun Ling) - 33169.73 --- 607.5

Fu Pen Zi - 244.2 267.24 270.28 274.27 283.5 285.34 286.24 287.24 288.25 302.23 306.22 340.28 368.7 382.7 410.76 414.71 432.41 435.39 436.45 438.81 448.4 449.38 454.68 457 463.4 464.4 472.7 484.74 486.7 488.7 504.7 528.8 558.9 576.85 578.56 594.5 610.5 616.48 666.84 679.2 882.7
Fu Pen Zi - 18223.35 --- 907.2

Fu Ping - 271.31 275.26 278.58 279.3 281.35 286.24 295.4 296.53 299.4 312.6 313.39 360.4 412.7 418.35 424.8 432.38 448.4 462.4 463.4 464.38 536.87 546.95 568.87 576.85 584.9 600.87 610.74 622.9 624 636.5 638 640.5 710.81 Fu Ping - 14975.33 --- 745.5

Fu Shen - 180.16 185.28 192.12 199.31 200.32 256.42 342.3 454.68 457 468.75 470.7 482.7 485 487 498.7 500.7 512.7 514.7 527 528.76 536.9 Fu Shen - 8481.2 --- 422.4

Fu Zi - 256.42 264.28 266.34 271.31 279.4 280.45 289.33 292.29 303.26 304.25 308.5 312.53 313.4 314.4 328.36 329.44 330.5 332.44 334.45 341.4 343.51 347.5 355.5 357.49 359.5 377.52 407.55 414.71 416.38 421.57 423.61 437.6 446.76 449.54 451.6 452.7 453.64 456.78 463.68 465.6 467.6 469.6 479.61 481.62 485.6 493.71 497.63 499.6 507.62 567.71 571.7 573.68 576.85 583.79 589.68 597.74 599.71 601.73 603.7 613.75 615.72 627.76 628.54 629.74 631.72 643.76 645.75 647.71 675.77 687.77 699.84 700.91 741.8 776.9 781.1 812.1 840.14 Fu Zi - 37005.15--- 677.7

Gan Cao - 278.34 282.29 284.31 285.34 286.28 290.27 294.47 298.26 300.28 302.24 302.28 304.47 308.35 310.51 312.53 314.29 316.26 320.46 322.38 324.63 328.29 330.29 332.26 333.38 336.36 338.43 340.45 344.36 348.48 350.36 352.4 354.4 355.43 356.41 358.39 364.35 366.4 368.46 370.44 372.4 380.48 382.5 384.41 388.5 390.51 392.53 394.55 398.49 404.46 406.56 408.5 410.55 414.71 418.4 420.5 422.47 424.53 427.4 430.7 432.38 434.48 436.54 438.6 442.37 444.51 448.5 452.54 454.76 457 458.75 464.38 468.67 470.76 478.88 484.71 440.53 468.67 470.7 472.78 486.76 488.74 490.64 496.75 500.71 512.72 514.65 516.67 528.8 551 562.52 564.49 570.54 576.7 578.52 580.53 595 610.52 624.54 636.47 680.97 692.7 693.6 726.7 778.92 806.93 808.95 820.9 822.93 824.95 834.94 838.93 840 849.96 850.94 893.1 907.1 935.14 953.1 985.1 1013.13 1134.98 Gan Cao - 59542.48 --- 401.1

Gan Jiang - 238.5 266.33 267.24 276.4 278.4 292.37 294.39 296.4 316.43 318.45 322.44 326.39 332.5 338.44 344.4 348.5 350.5 356.41 358.45 374.43 378.55 380.5 386.4 388.51 404.45 460.52 464.41 490.54 548.5 586.94 678.81 680.82 868.7 Gan Jiang - 13015.02 --- 648

Gan Sui - 192.17 210.18 228.24 254.24 284.26 286.24 300.26 316.44 330.46 332.43 354.27 360.4 364.43 376.36 393.5 426.72 432.6 434.35 437 441 457 471 478.6 482.65 498.72 502.7 540.7 616.92 623 628.98 645 651 657.7 673.7 687 717 722.73 730.8 746.75 776.82 777.81 793.81 801 883.29 899.3 947.15 1697.33 1079.27 1109.3 Gan Sui - 28052.58 --- 513.9

Gao Ben - 242.7 256.42 260.37 264.32 266.33 280.45 300.3 302.24 312.53 314.4 316.48 318.28 354.31 356.37 368.64 372.37 376.44 400.38 414.7 432.38 448.38 472.7 474.5 576.85 580.53 670.73 684.7
Gao Ben - 10418.8 --- 518.7

Gao Liang Jiang - 235.28 242.29 246.22 264.4 256.25 259.26 265.3 270.24 282.38 286.24 296.4 298.38 300.39 302.24 305.41 306.39 308.33 310.39 312.44 316.26 326.43 328.4 330.42 334.45 342.43 344.4 346.37 368.38 370.4 374.43 376.44 386.4 396.43 414.7 454.51 480.6 578.52 815.26
Gao Liang Jiang - 13033.46 --- 648.9

Ge Gen - 254.28 268.26 270.24 284.26 312.53 338.4 340.6 368.64 386.5 404.5 414.71 416.4 424.7 430.4 432.4 433.6 442.72 446.4 458.72 502.47 504.44 518.73 548.5 576.85 578.52 588.64 594.52 606.6 624.77 636.6 740.66 927.12 1181.31 1383.5 Ge Gen - 17641.49 --- 878.4

Gou Ji - 216.19 224.25 272.25 286.24 288.25 300.26 310.3 312.3 324.4 328.4 330.29 332.3 336.3 338.35 340.13 356.4 364.4 366.4 378.4 380.4 382.4 394.4 396.4 412.4 642.5 654.8 Gou Ji - 9269.11 --- 461.4

Gou Qi Zi - 278.43 280.45 282.55 284.5 288.94 289.4 291.43 294.5 296.6 299.32 301.34 302.23 308.56 309.4 310.6 312.32 313.35 317.4 318.3 321 322.6 323.2 324.63 32

9.35 334.3 336.4 337 338.65 348.4 349.38 352.7 354.31 358.3 363.36 365.4 376.36 37
8.38 380.39 386.65 388.67 394.76 398.74 400.76 402.7 406.4 408.79 412.7 414.79 419.
67 422.81 427 428.82 430.75 434.39 436.95 438.81 440.83 442.76 444.78 450.9 454.7
3 456.83 466.9 468.75 469.63 470.8 480.46 482.87 485 490.93 499.79 506.97 526.5 53
0.66 536.87 552.87 562.8 566.9 568.87 576.85 582.59 594.52 608.54 610.5 611.5 616
616.91 619.19 624.54 933.13 1009.14 1045.7 1355.4 1356.4 Gou Qi Zi - 42847.2 ---
784.8

Gou Teng - 182.22 192.17 198.17 204.35 212.25 272.25 278.34 281.48 286.24 290.
27 301.34 302.24 307.4 314.25 322.44 323.4 328.27 330.5 331.4 336.4 337 338.4 339.
4 341.4 342.4 343 346.4 350.45 352.47 353.4 354.49 355.42 356.4 358.39 367 368.5 3
70.44 382.5 384.52 392.49 398.44 400.68 410.7 412.69 414.71 422.5 432.56 438.57 44
2.75 446.4 448.4 450.4 452.41 454.68 457 462.4 463.4 464.38 470.73 472.7 488.7 498.
53 501.75 514.65 544.55 546.6 556.71 576.85 578.52 610.52 618.84 632.9 648.9 674.6
9 740.66 795.1 825 1323.1
Gou Teng - 33222.92 --- 608.4

Gu Sui Bu - 270.24 272.25 274.27 286.24 288.25 289.4 290.27 306.27 322.22 354.
4 358.4 362.42 373.39 374.34 385 392.44 400.68 408.7 410.72 412.7 414.71 418.3 422.
34 424.74 427.4 429 432.4 434.39 436.41 438.51 440.74 446.36 448.4 450.39 452.45 4
54.51 458.5 462.36 464.38 482.8 485 520.5 535.5 574.83 576.85 578.52 581 594.52 59
6.53 611 756.7 Gu Sui Bu - 22082.64 --- 404.4

Gu Ya - 342.3 692.7 Gu Ya - 1035 --- 380.7

Gua Lou - 241.39 244.24 246.34 254.41 256.42 267.24 270.24 272.5 278.43 280.45
282.46 284.5 286.24 294.47 296.5 300.26 304.45 306.48 308.5 321.29 330.29 332.4 33
4.28 362.42 368.64 369.63 396.7 400.68 410.72 412.7 413.42 414.71 416.72 418.52 42
4.7 426.8 430.7 432.38 438.7 440.7 442.72 450.82 452.8 457 462.44 516.75 544.89 55
8.7 560.72 574.93 576.85 586.94 592.7 610.5 618.7 635 737.93 756.9 807.3 851.49 85
3.51 873.49 875.51 877.53 891.5 1480.6 Gua Lou - 31220.84 --- 571.8

Guan Gui - 442.37 578.52 866.77 Guan Gui - 1887.66 --- 694.5

Guang Fang Ji - 154.25 158.12 196.29 266.33 293.27 341.4 342.4 414.71
Guang Fang Ji - 2166.77 --- 797.1

Guang Huo Xiang - 266.33 267.24 270.24 278.52 280.24 282.29 283.24 284.48 286.
24 290.48 299.49 300.33 302.24 314.29 316.3 321 323 330.36 332.43 334.3 336.4 337
338.4 342.4 344.3 352.4 354.3 358.34 370.35 390.6 414.7 422.5 426.7 428.73 432.4 44
6.4 452.59 457 460.47 462.44 463.4 464.76 470.73 510.5 518.56 524.57 534.6 576.85
580.58 594.7 617 622.57 624.6 625 1589.67
Guang Huo Xiang - 23209.55 --- 425.1

Guang Jin Qian Cao - 237.25 256.25 268.26 270.24 272.25 284.5 286.24 300.26 30
2.24 312.53 316.26 354.35 414.7 426.72 432.38 448.38 464.9 480.9 564.49 594.52 59

6.49 608.54 610.56 636.5 891.5 941.11 1253.35 Guang Jin Qian Cao - 12825.67 --- 638.7

Gui Ban - 228.37 241.39 242.4 256.42 270.4 280.4 281.26 282.5 283.11 296.5 310.5 343.5 354.36 632 646 Gui Ban - 4949.11--- 669.9

Gui Jian Yu - 256.42 268.35 270.24 272.25 284.26 286.28 288.25 290.27 298.29 300.31 302.28 314.29 316.26 318.28 320.29 330.29 332.26 342.3 344.32 346.3 354.31 358.39 360.36 368.38 374.34 376.34 400.68 410.76 412.9 414.71 418.44 424.7 426.72 428.73 432.38 434.44 442.72 444.69 446.36 448.4 454.7 456.7 460.4 462.4 463.4 464.38 470.7 484.7 512.72 532.6 546.6 548.49 564.49 576.85 586.94 592.5 594.5 610.56 612.5 628.5 652.64 698.8 761.7 860.94 869 883.93 887.1 1128.21 Gui Jian Yu - 31627.49 --- 579.3

Gui Zhi - 198.3 200.32 202.34 204.39 206.24 208.26 212.41 219.24 220.35 222.37 226.44 234.33 238.28 240.3 254.49 268.54 278.38 280.4 281.48 282.46 284.5 286.24 290.27 296.6 300.3 304.25 310.43 314.5 316.26 328.31 338.65 354.4 357.5 358.47 366.4 380.73 408.5 414.71 422.51 428.6 442.37 532.84 576.85 578.52 682.8 866.77 Gui Zhi - 15221.6 --- 757.8

Hai Feng Teng - 223.35 264.32 281.27 283.33 295.29 296.53 300.26 301.38 309.36 310.36 328.4 334.41 340.42 342.42 343.5 354.4 356.45 358.43 359.38 362.33 365.34 370.45 372.46 374.43 376.45 388.5 397.5 400.5 406.43 412.7 414.71 424.43 425.4 430.54 432.51 440.71 442.73 453.6 456.76 458.73 468.77 474.73 484.7 490.72 566.69 568.57 646.82 927.13 942.12 943.12 959.13 971.1
Hai Feng Teng - 23034.07 --- 421.8

Hai Jin Sha - 236.14 249.26 255.42 256.43 268.5 270.46 272.43 278.35 279.4 280.45 282.47 284.5 286.24 296.5 300.27 310.61 326.3 338.66 342.3 356.55 358.3 382.7 386.4 390.6 408.8 410.73 414.72 424.75 426.73 428.7 436.8 446.4 448.38 452.8 504.44 508.7 546.8 576.86 578.52 592.55 608.55 726.6 728.61 1432.45 Hai Jin Sha - 18392.13 --- 915.6

Hai Tong Pi - 246.31 254.24 256.26 268.27 270.24 272.3 283.26 284.27 286.33 290.27 294.4 296.23 297.35 298.29 299.4 300.26 313.39 316.31 317.38 322.36 324.4 331.4 338.4 343.4 344.36 358.3 392.49 400.69 406.48 410.73 412.7 416.47 428.74 430.41 456.71 478.4 504.44 576.86 594.71 667 794.97 931.12 990.86 1105.27 Hai Tong Pi - 18206.43 --- 906.6

Hai Zao - 256.42 270.45 271.19 278.34 280.45 282.46 284.48 302.45 304.47 308.5 310.51 312.53 314.33 340.58 366.46 382.32 386.66 398.32 400.64 402.5 412.7 428.69 444.69 488.7 504.7 546.52 642.83 658.91 829 959.13 975.13 991.13 Hai Zao - 14336.19 --- 713.7

Han Fang Ji - 232.32 266.33 322.35 341.27 342.4 357.3 557.6 608.7 622.75
Han Fang Ji - 3651.02 --- 494.1

Han Shui Shi - 100.1 283.11 310.2 Han Shui Shi - 693.3 --- 693.6

He Huan Pi - 299.4 322.48 382.32 394.4 454.7 470.7 484.71 486.73 506.45 614.55 630 636.5 652.9 659 684.94 712.69 874.83 1131.3 1829.96 1831.94 1845.96 1887 2014.15 2028.18 2042.21 2069.23 2083.26 2142.32 2144.3 2156.35 2158.32 2172.35 2199.37 2213.4 He Huan Pi - 43216.9 --- 791.7

He Shi - 162.14 208.25 240.3 248.32 254.24 264.32 268.27 280.45 286.24 300.31 382.72 412.7 584.7
He Shi - 3892.96 --- 526.8

He Shou Wu - 200.23 228.24 234.33 236.26 240.25 254.24 256.25 258.23 269.23 270.24 284.26 286.24 290.27 300.26 312.27 313.35 330.29 336.46 346.29 356.37 390.4 406.4 414.71 418.39 422.38 432.38 434.35 446.4 448.42 462.44 478.4 504.7 556.5 568.52 576.85 608.55 626.57 682.8 730.62 1049.16
He Shou Wu - 16262.5 --- 809.7

He Ye - 224.43 228.37 254.49 265.31 270.24 271.31 275.26 277.32 279.3 281.35 284.5 285.34 286.25 290.27 291.3 293.36 294.47 295.4 296.53 298.55 299.4 302.25 304.25 306.27 311.37 312.53 313.39 316.3 318.25 322.27 328.49 330.5 340.58 346.5 348.52 350.45 354.31 360.4 380.73 394.76 412.69 414.71 424.8 426.7 432.38 442.37 448.41 450.9 456.7 463.4 464.38 478.6 480.38 504.7 508.43 576.85 578.52 608.72 611 623 624.54 638 640.5 710.81 869 He Ye - 25475.36 --- 466.8

Hei Dou - 268.43 270.24 278.43 280.4 282.52 284.5 286.23 287.24 288.1 293.4 294.47 296.5 300.1 303.24 307.34 309.27 310.5 312.55 314.1 324.5 326.56 327.37 336.33 338.35 340.58 344.1 354.61 360.31 368.64 370 382.66 390.34 397.5 400.68 410.76 412.71 414.71 416.38 423.5 424.7 425.4 426.71 430.7 432.38 440.7 441.4 444.6 446.12 449.42 456.7 458.8 463.5 465.38 472.74 473.44 474.72 485 487.46 500.8 507 518.4 564.49 576.85 578.52 611 684.13 692.7 698.15 927.26 943.12 959.12 969 1047.18 1077.21 1107.24 1239.35 1269.38 1355.36 Hei Dou - 38699.78 --- 708.9

Hei Zhi Ma - 206.32 209.37 212.33 220.35 223.4 226.44 237.42 244.2 267.24 280.4 282.46 295.5 307.34 310.5 312.53 316.26 327.3 340.6 354.4 358.38 368.64 370.35 372.37 382.88 402.65 412.69 414.71 420.37 430.7 432.38 441.4 442.7 448.38 478.4 487.46 504.7 534.7 568.57 624.59 650.84 654.61 667 829.16 880.3 1225.3 1253 1267.4 2122.51 Hei Zhi Ma - 23621.5 --- 432.6

Hong Hua - 267.24 270.5 278.43 280.45 282.46 283.24 284.5 285.47 286.25 288.27 294.47 296.5 302.28 304.25 306.5 308.5 310.6 312.53 316.38 318.24 324.33 328.49 330.5 332.5 340.28 342.34 346.5 352.7 354.31 356.4 358.39 372.45 376.36 386.65 394.76 408.79 411 412.7 414.71 416.7 424.79 426.7 430.7 440.79 442.7 446.36 448.41 450.9 452.44 456.42 458.5 464.51 466.9 468.95 478 480.41 536.87 540.67 543 545 548.5 568.9 575.52 576.85 580.54 583.74 584.87 586.94 594.52 595.56 602.6 610.57 612.53 614.5 620.55 624.6 626.57 660.62 663 665.1 673.89 679.77 742.72 766.76 772.73 788.7

3 841.29 891.5 910.78 956.81 959.1 984.94 1062.9 Hong Hua - 45769.44 --- 838.2

Hong Jing Tian - 170.25 198.17 207.25 286.24 300.3 610.52 Hong Jing Tian - 1772.73 --- 652.2

Hong Qu - 176.12 692.7 Hong Qu - 868.82 --- 868.8

Hong Shen - 250.36 254.46 256.48 260.41 270.51 278.43 290.27 296.58 312.6 324.64 338.74 366.8 368.61 380.83 390.62 394.86 408.89 410.8 414.79 456.78 458.8 460.82 470.7 476.82 478 620.96 622.98 638.98 665.02 771.11 785.14 801.14 947.3 957.24 1079.43 1109.46 1121.47 Hong Shen - 19191.83 --- 955.5

Hou Pu - 279.3 280.4 281.3 282.55 284.5 286.28 291.3 294.5 296.5 298.5 300.35 306.4 308.33 314.4 316.35 329.39 330.38 331.4 334.45 338.65 340.41 342.41 344.42 346.33 351.4 372.37 382.7 398.49 403 406.92 414.71 416.5 418.57 420.58 428.73 432.5 436.58 486.68 504.7 520.5 522.59 530.65 538.8 546.65 562.65 564.67 576.85 580.58 584.7 596.67 610.6 624.59 636.5 742.72 781 786.7 1085.43
Hou Pu - 25126.08 --- 460.2

Hu Gu - 682.33 801.42 838.43 878.45 893.56 909.47 1009.5 1236.68 2487.13 (peptides)
Hu Gu --- 9736.97 --- 484.8 (peptides)

Hu Gu - 256.42 262.86 310.2 Hu Gu - 829.48 --- 829.5

Hu Lu Cha - 272.25 286.24 288.25 290.27 304.25 319.27 339.6 340.58 342.3 354.4 386.44 412.7 414.71 432.38 434.43 448.38 456.7 536.9 576.85 594.56 610.52 Hu Lu Cha - 8441.98 --- 420.3

Hu Lu Ke - 204.35 538.46 Hu Lu Ke - 742.81 --- 742.8

Hu Zhang (Jiang) - 254.24 256.25 258.23 260.24 262.3 268.26 270.24 277.23 284.26 286.24 290.27 300.26 302.28 314.29 316.26 330.29 354.3 358.3 366.41 382.32 390.4 402.4 406.4 408.4 414.71 416.38 432.6 434.08 432.6 434.35 439.46 442.37 446.4 448.4 452.4 457 462.44 463.4 464.38 470.5 472.53 480.46 486.68 504.7 514.56 542.49 564.49 568.5 576.85 580.53 608.72 610.5 617 626.57
Hu Zhang (Jiang) - 22466.12 --- 411.6

Hua Jiao - 244.29 245.23 247.38 254.41 257.37 259.26 263.37 264.45 271.31 273.37 282.46 284.3 285.34 287.35 288.42 289.33 290.27 291.43 293.44 294.34 295.37 297.39 299.36 300.26 301.38 302.23 303.3 305.41 309.4 311.37 312.32 315.4 317.34 319.35 322.31 325.4 327.41 328.32 329.43 333.55 335.57 336.4 337 339.43 341.45 343.46 344.4 348.4 349.38 354.44 355.47 356.43 357.49 361.6 362.37 363.36 365.4 368.38 369.5 372.37 381.38 383.52 384.38 395.53 400.42 408.79 414.4 416.46 426.72 432.5 434.35 448.38 450.52 463.4 464.38 470.8 494.6 506.72 508.74 524.73 608.5 611 640.54

Hua Jiao - 29456.48 --- 539.7

Hua Rui Shi - 100.09 506.8 - Hua Rui Shi - 606.89 --- 606.9

Hua Shi - 101.96 140.69 Hua Shi - 242.65 --- 242.7

Huai Hua - 240.5 244.33 246.35 248.36 254.49 260.33 262.35 264.36 268.5 270.24 274.31280.4 282.55 284.26 286.24 290.27 294.4 300.26 302.24 312.53 316.26 340.28 344.32 336.43 350.41 354.4 356.37 368.4 370.4 374.3 382.7 388.6 397.56 408.5 414.7 1 416.66 424.7 426.72 430.4 431.44 432.38 434.39 438.51 440.5 442.8 444.72 446.4 4 48.38 451 452.5 455 456.53 458.72 461 464.38 470.6 473 478.5 492.6 495 500.84 508. 6 526.62 532.4 536.87 556.96 576.85 578.52 580.53 594.52 610.52 624.54 724.66 740. 66 756.66 781 795 797 809.03 811 904.82 927.12 973.1 943.12 1105.2 1237.4 1267.36 Huai Hua - 42538.64 --- 779.1

Huang Bai - 251.41 259.26 260.2 266.33 268.35 282.46 284.5 287.3 290.27 292.33 2 98.4 300.3 302.23 303.36 316.3 321.3 322.3 323 334.3 336.4 337 338.4 339.4 341.4 34 2.41 343 352.4 353.41 354.31 355.42 356.44 365.4 372.41 374.42 400.68 412.7 414.71 418.44 420.45 426.7 454.51 455 457 458.72 463.4 468.8 470.51 472.7 474.7 476.7 486. 51 488.74 510.5 512.6 514.56 518.51 520.5 530.6 534.6 536.53 576.85 594.8 608.72 6 10.5 617 696.65 Huang Bai - 26830.01 --- 491.4

Huang Jing - 221.29 223.23 237.27 254.24 256.25 270.24 271.31 275.26 281.26 28 4.27 295.29 296.55 300.31 302.32 384.38 414.71 416.65 418.44 432.38 446.63 457.43 458.75 576.86 580.58 610.75 624.78 638 740.66 742.72 780.9 1063.24 1065.17 1213.3 2 1227.34 Huang Jing - 17062.78 --- 849.6

Huang Lian - 266.34 271.31 282.29 284.26 290.27 292.29 294.47 300.33 302.24 31 3.35 316.3 320.32 321.33 322.33 323 327.37 328.36 330.3 334.3 336.4 337.37 338.4 3 39.39 341.4 342.4 343 349.38 351.35 352.4 353.42 354.31 355.43 358.39 360.4 362.41 372.28 382.32 383.39 388.41 398.32 404.55 414.7 455 464.76 470.51 472.53 504.4 51 0.5 524.57 534.64 594.7 608.73 610.75 617 622.76 638 622.7 624.77 684.68 Huang Lian - 23701.58 --- 434.1

Huang Qi - 256.42 267.32 268.26 270.28 271.31 279.37 280.4 283.24 284.26 286.2 4 296.44 298.29 300.31 302.32 305.41 307.4 314.31 316.3 340.6 342.3 354.31 360.4 3 62.41 376.36 380.4 397.6 412.6 413.6 414.71 418.35 424.7 426.7 428.73 430.4 441.4 4 46.4 448.38 452.45 458.72 462.45 464.5 468.55 476.43 480.51 487.47 490.71 506.7 53 6.87 575.78 576.85 577.8 580.53 584.87 586.94 600.9 610.74 612.5 622.83 626.67 638 642.67 646.9 742.72 768.97 785 827 868 869 884.1 901.1 911.1 913.1 931.11 943.12 9 47.11 973.15 1243.3 2122.51 Huang Qi - 42207.96 --- 773.1

Huang Qin - 254.41 256.42 266.31 268.43 270.28 272.27 278.34 280.4 282.5 284.5 286.28 288.25 290.27 294.47 296.57 298.29 300.3 302.3 304.25 312.53 314.29 316.26 318.28 320.25 321 322.5 324.5 326.56 328.32 330.29 332.26 337 338.57 340.58 342.3 344.32 346.3 348.4 352.5 354.61 360.31 362.33 368.64 370 374.34 376.34 382.66 390.

6 400.68 407.4 410.72 412.7 414.71 416.38 425.4 430.4 432.42 437.5 438.77 446.4 44 8.4 460.4 462.4 476.47 506.97 508.43 524.57 527.5 532.6 546.6 548.49 564.49 576.85 586.94 594.5 608.5 612.5 619.19 622.49 624.59 628.5 652.64 742.72 887.1 Huang Qin - 34269 --- 627.6

Huo Ma Ren - 248.32 254.41 256.42 270.24 274.27 278.43 280.4 282.46 284.5 286. 23 300.4 304.5 310.5 312.4 313.35 314.5 316.48 326.4 328.45 330.5 340.6 342.4 343.4 344.44 346.4 348.4 354.4 357.5 358.47 360.44 368.47 369.5 370.4 372.5 374.51 376.4 378.4 379.5 384.59 388.41 396.6 400.68 402.65 405.5 413 416.5 420.58 422.34 428.77 430.7 432.38 442.6 448.38 450.61 453 454.6 456.7 473 478.6 484.7 486.81 489 490.67 492.6 532.84 550.86 569.6 600.87 606.72 608.69 610.6 650.78 652.75 653.74 668.75 6 82.8 694.79 710.79 712.77 741.85 742.72 779.7 805.8 825.89 849.96 857.8 867.85 868. 8 874 884 925.9 933.4 987.9
Huo Ma Ren - 45256.18 --- 828.9

Huo Xiang - 248.32 256.42 267.24 270.23 278.34 279.25 280.44 282.46 283.24 284. 47 286.23 288.38 299.48 300.26 302.23 316.26 324.98 326.4 330.29 336.3 338.4 342.3 344.3 354.3 358.34 368.33 370.35 380.39 414.71 426.7 446.49 457 464.38 470.73 488. 44 576.85 592.5 618.8 622.57 624.77 960.84 1085.43 1128.21
Huo Xiang - 18076.35 --- 900

Ji Li - 270.24 271.31 284.26 286.32 295.4 297.43 299.35 302.55 311.38 313.4 314. 29 315 316.26 327.3 330.29 368.64 372.4 384.64 398.79 400.71 402.7 412.72 414.79 4 28.77 431 432.71 440.49 444.72 448.4 456.83 538.46 573 576.86 610.75 624.77 638 6 40.5 710.82 755 869 940.22 1041.28 1049.3 1081.35 1317.62 1325.72 Ji Li - 24065. 74 --- 440.7

Ji Xue Cao - 271.31 274.39 281.47 282.46 284.47 286.24 290.27 302.25 303.13 32 4.37 338.35 352.38 354.31 358.34 360.31 378.46 386.65 410.72 412.69 414.7 418.4 42 6.72 432.4 448.37 450.6 456.7 462.39 464.4 472.73 478.4 488.78 490.67 502.81 504.7 8 516.49 545 564.5 576.84 602.54 611 624 638 667 813 829 893.5 943.21 957.1 959.1 2 971.32 975.12 991 1001.2 Ji Xue Cao - 27844.36 --- 510

Ji Xue Teng - 268.26 270.28 272.5 282.29 283.25 284.26 286.32 288.25 290.27 29 6.31 298.29 300.26 302.32 304.25 306.27 314.29 316.48 317.27 318.28 320.34 322.35 327.4 330.29 331.3 332.3 338.4 344.36 346.33 350.36 352.38 356.28 358.3 360.31 366. 36 372.41 376.36 392.49 394.42 400.68 410.42 412.7 418.4 426.75 428.73 430.71 432. 38 434.4 438.43 440.44 442.72 448.5 450.4 454.7 457 458.5 465.4 466.4 468.8 476.39 482.52 496.55 502.86 520.53 534.6 560.5 562.52 576.85 610.52 622.82 624.6 640.65 6 92.88 757 953 1085.43 1356.4 1457.74 1589.67 Ji Xue Teng - 36162.93 --- 662.4

(Bai) Jiang Can - 244.29 255.44 256.42 283.49 300.26 316.26 330.29 358.4 367.4 3 86.65 395.48 396.65 402.48 426.72 441.4 464.6 468.75 480.63 509.8 535.9 536.87 537. 9 543.7 562.8 563.9 581.7 610.7 783.9 909.2 (Bai) Jiang Can - 13251.98 --- 659.7

Jiang Huang - 254.41 256.42 266.42 278.43 280.44 282.46 284.5 292.33 302.45 30

4.47 308.33 310.34 312.53 324.33 326.34 330.5 338.57 340.58 348.4 352.4 354.35 363.36 366.41 368.4 370.4 372.41 374.43 384.4 386.65 392.4 396.43 400.68 412.7 414.71 422.6 514.56 608.5 Jiang Huang - 12998.04 --- 647.1

Jiang Xiang - 208.25 212.2 216.32 220.35 228.37 236.35 240.3 244.24 254.28 256.3 268.26 270.32 272.3 274.27 282.29 284.5 286.32 288.32 294.37 296.57 298.25 300.31 302.33 304.29 314.29 316.31 330.34 332.35 414.72 447.4 498.7 540.6 554.58 556.6 558.62 572.65 610.52 Jiang Xiang - 12387.34 --- 616.8

Jiao Gu Lan - 254.49 256.42 262.26 268.52 274.31 280.45 281.48 282.46 284.5 302.28 314.29 324.63 330.3 342.3 362.28 385.3 386.65 390.23 400.68 410.75 412.7 414.71 416.72 424.78 432.38 434.65 438.68 440.83 446.79 460.82 470.7 472.7 476.82 504.48 514.74 550.68 610.52 638.87 716.11 741.1 753 767.1 769.14 771.11 783 785 787 799.12 801.14 815 829 859.7 901.22 917.13 919.1 931.25 933.27 947.3 949.13 961.14 963.15 1033.2 1047.23 1049.24 1061.25 1063.27 1073.26 1077.46 1079.43 1091.44 1093.46 1095.43 1105.3 1107.28 1109.46 1111.27 1123.28 1125.29 1179.51 1239.44 1255.44 1271.44 1356.4 1589.67
Jiao Gu Lan - 60694.81 --- 408.9

Jie Geng - 266.37 267.24 270.46 272.25 274.33 280.45 284.5 286.24 300.44 327.3 337.4 341.4 376.36 378.51 388.4 390.43 392.55 396.43 404.37 412.77 414.7 423.55 424.7 432.38 434.35 438.77 442.73 448.38 456.71 504.7 506.72 518.81 520.78 522.72 534.81 536.83 546.82 548.79 556.6 559 560.81 562.82 568.5 574.83 592.55 598.91 604.82 612.54 680.97 682.84 697 724.98 739 740.66 843.13 845 859.18 861.15 961.23 1045.18 1077.21 1079 1093.22 1113 1121.37 1137 1145.34 1195.31 1209.32 1221.5 1223.47 1225.33 1227.31 1237.5 1239.47 1241.33 1251.53 1253 1255.35 1267.4 1295.59 1325.41 1343.42 1355.43 1359.42 1371.5 1373.45 1385.62 1387.5 1401.62 1415.71 1417 1429 1533.8 1549.8 1801.6 Jie Geng - 77336.98 --- 521.1

Jie Zi - 204.22 207.27 212.24 216.32 224.3 229.27 267.24 272.25 280.4 282.46 284.5 298.46 300.26 310.36 312.53 327.37 338.6 340.6 349.38 359.37 370 389.4 396.6 397.5 400.7 402.52 404.54 412.7 414.58 423.5 425.4 428.6 438.68 441 444.6 453 455 456.7 458.6 460.6 462.62 463.5 464.47 468.7 470.6 473 475 476.6 488.7 490.59 496.8 498.7 500.67 502.68 510.7 512.63 515 516.7 518.7 526.78 528.8 530.72 532.67 546.69 549 554.8 566.64 568.82 572.77 574.7 581.7 585 612.79 614.81 630.81 791 800.83 Jie Zi - 34067.31 --- 624

Jin Yin Hua - 264.4 270.31 272.33 281.29 282.5 284.5 286.24 288.25 290.54 294.47 298.37 300.26 302.28 308.5 314.55 316.26 328.32 330.55 339.6 342.3 350.3 354.31 358.34 368.64 372.37 374.34 376.36 380.73 384.57 386.65 388.41 390.4 400.68 404.37 406.42 410.46 412.7 414.71 415.5 418.4 424.8 430.7 432.64 434.48 443.45 448.4 450.39 457 460.5 462.4 463.4 464.45 472.7 474 476.53 478.36 502.42 516.5 522.5 530.52 536.87 537.6 538.59 540.52 543 546.92 550.68 552.87 562.82 564.5 566.51 568.87 570.59 574.83 576.85 586.94 594.52 604.8 610.5 612.5 620.7 640.5 646.9 678.59 688.63 726.6 746.71 750.96 758.72 788.7 913.1 929.1 962.15 967.14 1075.24 1207.35 1237.38 1399.52 Jin Yin Hua - 50189.89 --- 919.2

Jin Ying Zi - 270.24 272.25 278.43 282.46 284.5 286.28 290.27 297.43 300.26 302.24 308.5 310.51 312.53 316.26 334.41 340.6 344.32 346.5 350.4 352.38 358.3 376.36 380.44 390.4 394.46 404 410.5 414.71 424.5 454.68 457 463.4 464.4 470.76 472.78 484.4 486.81 488.78 500.75 502.72 504.78 518.72 576.85 578.52 590.83 594.52 623.83 634.5 651 664.87 785 936.65 970.66 1104.75 Jin Ying Zi - 24716.4 --- 452.7

Jin Zhan Ju - 152.23 316.26 388.5 418.52 442.72 454.7 458.72 471.7 472.7 478.4 536.9 546.6 552.87 584.87 600.9 610.5 624.5 632.82 756.66 770.7 794.96 943.1 957.1 973.1 1105.3 1119.2 1135.2 Jin Zhan Ju - 17299.73 --- 861.3

Jing Da Ji - 268.26 270.5 284.27 300.3 302.45 310.44 314.4 318.45 330.26 342.3 352.43 354.7 358.42 368.48 386.66 405.45 406.43 414.71 424.49 426.73 428.74 438.52 448.4 454.51 456.5 468.75 484.54 504.4 535 536.58 550.6 576.85 578.52 584.7 586.94 590.89 594.57 610.52 712.7 718.62
Jing Da Ji - 17800.98 --- 886.2

Jing Jie - 256.25 264.4 268.5 270.24 278.5 284.5 286.28 296.57 300.26 302.28 312.53 314.29 330.42 338.65 339.6 340.6 348.39 360.31 366.71 367.6 368.64 374.34 380.73 385.3 390.23 394.76 400.68 402.6 410.72 412.7 418.39 420.5 440.7 446.49 448.41 457 462.36 464.42 470.7 472.7 478.92 490.7 536.47 552.52 563.1 576.85 611 626.5 716.64 730.67 740.66 756.66 772.7 1085.43 1356.4 Jing Jie - 25244.47 --- 462.3

Jing Mi - 224.21 229.4 236.22 314.33 342.34 344.31 346.37 354.31 358.34 370.35 376.36 377.5 386.65 390.34 400.68 410.72 412.7 446.4 466.5 484.7 524.57 536.9 562.8 564.5 568.87 576.85 580.5 584.87 600.9 692.7 812.25 829.28 Jing Mi - 14707.72 --- 732.3

Jiu Cai Zi - 270.46 278.44 280.45 282.46 284.5 287.32 296.54 310.52 312.54 343.38 354.62 368.65 370.6 387.52 410.73 414.72 478 492.62 522.65 528.51 536.67 544.51 556.48 610.52 817 937.1 1051.21
Jiu Cai Zi - 12328.72 --- 613.8

Ju Hong - 270.28 272.26 286.28 288.3 294.4 300.3 302.28 309.43 323.35 334.42 336.43 350.45 352.47 354.45 364.44 368.43 369.48 372.37 380.48 385.7 388.4 390.43 394.51 396 404.5 410.5 414.72 418.4 424.5 426.73 432.64 434.4 448.7 455 470.52 472.53 478.72 552.66 562.61 576.86 578.52 580.54 594.57 610.56 611.62 634.6 767 793.95 983.15 Ju Hong - 21723.84--- 397.8

Ju Hua - 256.42 268.5 269.38 270.24 271.4 272.25 282.55 284.5 286.24 288.94 290.27 294.47 296.57 298.5 300.26 302.23 310.6 312.5 314.76 316.26 318.23 320.47 324.63 326.56 338.65 340.58 344.32 352.7 354.61 362.33 366.71 368.64 374.34 380.73 382.66 388.4 394.76 396.69 408.79 410.76 412.69 414.71 418.35 422.81 426.72 428.77 432.4 438.77 443 444.73 446.4 448.4 449.38 450.9 459 460.82 462.84 464.9 468.75 478.4 482.4 491 492.95 506.9 516.45 545 566.3 576.85 578.52 581.7 584.87 592.5 595 608.5 611 625 738.7 740.66 1073.3 1105.3 Ju Hua - 34528.04 --- 632.4

Ju Luo - 266.34 280.45 290.27 296.60 302.30 312.60 320.3 321.33 322.3 323 328.4 329.4 336.4 337.37 338.4 339.39 342.4 346.5 351.4 352.4 353.42 355.43 365.4 369.41 372.37 381.47 383.49 385 432.38 478.72 510.5 536.89 539.6 568.89 608.73 611 622.76 636.74 638.75 652.79 666.8 682.81 868 1701.2 1231.34
Ju Luo - 21391.44 --- 391.8

Jue Ming Zi - 254.41 256.25 258.23 268.26 270.24 272.25 275.35 280.4 282.46 284.5 286.5 288.29 294.5 296.5 300.28 304.47 314.29 317.29 318.4 320.5 330.29 332.33 334.41 341.4 344.32 358.34 360.49 362.5 365 375 376.5 379 386.65 400.68 406.6 408.44 412.7 414.71 416.4 420.37 428.7 432.38 438.6 446.4 448.38 450.82 468.4 470.8 492.43 494.49 504.4 516.5 520.5 546.92 556.51 564.69 566.51 568.5 578.52 590.68 596.59 608.55 732.76 740.73 758.75 772.73 790.75 891.5 902.8 925 Jue Ming Zi - 31074.79 --- 569.1

Ku Ding Cha - 236.35 250.29 252.35 260.2 266.38 282.37 284.35 286.24 290.27 298.37 302.23 318.23 324.4 330.55 338.4 354.31 390.4 422.34 426.72 430.7 442.72 443 446.49 454.81 456.73 457 460.7 462.49 463.4 464.38 470.76 472.83 473 484.36 486.76 516.45 528.85 545 552.87 556.9 576.85 590.88 592.59 600.8 602.58 604.81 610.5 611.5 618.94 624.59 634.94 650.94 738.7 754.7 766.95 767 770.7 780.9 783.1 787 811.1 909.1 913.1 927.1 929.23 943.1 1059.39 1071.2 1073.2 1075.2 1089.2 1104.75 1106.77 1381.5 1723.2 1873.29 1875.31 Ku Ding Cha - 49319.66 --- 903.3

Ku Fan - 258.2 --- 258.2

Ku Shen - 240.5 244.33 246.35 248.36 254.49 256.25 260.33 262.39 264.41 268.5 270.24 272.25 274.31 276.37 280.41 282.55 284.26 286.28 290.35 294.4 296.36 298.29 300.39 302.23 308.4 322.35 336.43 338.35 340.37 344.32 346.46 348.64 350.41 354.4 356.4 358.47 360.4 368.4 370.4 374.3 386.39 388.6 408.5 414.71 416.66 422.51 424.7 426.5 430.4 431.44 438.51 440.5 442.5 444.72 446.4 448.4 451 452.54 454.61 456.53 458.72 461 462.4 470.6 473 478.5 486.73 492.6 495 500.84 508.6 526.62 528.9 532.4 546.48 551 556.96 562.52 580.53 610.56 943.12 973.1 1105.37 1223.39 1237.4 1267.36 1269.38
Ku Shen - 39062.3 --- 715.5

Ku Xing Ren - 200.32 212.41 220.35 226.44 228.37 240.5 254.49 256.25 264.32 268.5 270.45 272.42 278.43 280.4 282.55 284.5 285.34 286.28 294.47 295.29 296.57 297.35 298.5 308.5 310.6 312.53 316.31 324.63 327.37 336.3 338.65 340.6 342.51 352.7 354.31 358.4 362.33 366.71 372.4 380.73 386.65 388.37 394.76 408.79 410.72 412.7 414.71 418.39 422.81 436.84 448.4 450.9 456.7 457.43 458.5 464.9 478 478.92 482.4 492.95 535 550.51 578.5 592.5 625 738.7 742.8 822.93 885.43 1045.21 1073.3 1105.3
Ku Xing Ren - 29959.1 --- 548.7

Kuan Dong Hua - 218.42 220.39 222.41 226.50 228.42 234.37 242.45 244.23 256.48 260.41 264.50 266.52 267.28 268.59 270.51 278.38 280.50 284.54 285.33 286.25 292.51 294.53 296.60 302.25 314.51 316.48 336.52 338.74 342.34 352.77 354.34 365.47

368.37 370.58 378.56 382.80 390.57 404.60 406.57 408.89 410.81 414.79 418.38 426.80 428.77 434.38 442.80 448.41 460.72 464.41 484.40 490.70 502.76 504.50 506.70 514.52 516.49 530.52 532.64 552.96 576.95 584.96 610.57 636.51 807.49 815.41
Kuan Dong Hua - 25642.83 --- 469.8

Kun Bu - 275.26 276.41 278.43 280.45 282.46 288.4 291.34 292.46 294.47 296.53 300.22 302.45 304.5 312.53 314.25 320.48 337.3 372.28 376.36 382.32 386.65 396.7 412.7 426.7 429 454.73 462.39 481 504.4 602.46 606.9 610.52 634.84 658.9 662.85 742.55 866.64 880.3 959.26 1018.19 1039.18 1243.34
Kun Bu - 20659.1 --- 378.3

Lai Fu Zi - 240.42 244.31 254.41 256.47 261.23 268.4 278.43 280.45 282.46 284.5 292.46 294.47 296.5 298.29 300.3 308.5 310.36 312.53 320.51 324.5 326.56 337.3 338.57 340.58 352.59 354.61 368.64 370 376.36 380.65 398.66 402.65 407.4 414.71 422.81 425.43 430.7 436.5 437.5 448.47 457 462.4 484.8 498.7 514.7 524.57 528.5 540.57 576.85 708.92 710.74 Lai Fu Zi - 19487.94 --- 970.2

Lang Du - 220.35 230.3 238.37 246.22 328.27 340.28 354.31 358.38 362.4 366.5 374.34 418.44 456.4 532.7 542.5 556.52 570.54 584.6 616.78 667.8 742.72 774.9 Lang Du - 9883.62 --- 492

Lei Gong Teng - 194.19 196.29 198.17 204.35 208.17 220.27 222.24 223.25 226.25 248.32 254.41 260.2 270.24 274.27 278.34 280.27 282.29 284.5 286.24 300.43 304.47 306.27 312.4 314.42 317.47 318.45 326.43 328.45 330.5 342.43 343.4 344.44 346.46 348.4 354.4 358.43 360.44 368.47 369.5 370.4 376.41 378.42 379.5 388.45 400.5 402.4 405.53 413 414.71 418.44 420.58 422.34 426.72 428.77 432.4 434.39 436.58 440.7 442.72 444.52 446.4 448.41 450.61 453 454.7 457 458.68 462.4 470.68 473 478.6 484.75 486.81 489 492.6 498.74 500.75 504.62 516.54 550.86 569.6 576.85 580.53 594.5 600.87 606.72 608.69 610.65 620.77 650.78 652.75 653.74 665.9 668.75 694.79 710.79 712.77 741.85 742.72 763.7 777.7 779.7 805.8 821.78 825.89 831.77 849.96 857.81 867.85 868.8 874 878.87 884 915.8 925.9 933.4 945.9 987.9
Lei Gong Teng - 58224.1 --- 392.4

Li Zhi He - 242.35 254.49 270.46 278.35 280.45 282.56 284.5 290.27 294.48 296.49 302.24 308.5 310.61 338.66 341.32 360.44 381.38 386.66 408.8 412.7 414.72 440.71 454.7 457 470.6 472.7 484.7 546.92 564.22 574.84 576.85 581.5 594.71 604.82 610.52 611.5 618.85 624.78 704.9 751 883.1 885.45 1149.48 1205.39 1221.38 1367.53 Li Zhi He - 24198.58 --- 443.4

Lian Qiao - 198.22 200.23 206.19 213.23 222.37 228.24 242.25 256.42 258.23 264.27 272.5 280.44 282.29 284.5 286.24 300.3 302.28 306.29 309.45 316.48 318.23 320.34 322.35 327.4 336.33 342.3 346.37 354.31 358.4 360.4 367.35 369.37 372.45 374.42 376.4 388.41 390.34 402.39 404.41 407.5 412.7 414.71 426.75 432.51 436.8 442.72 448.38 450.48 454.73 457 460.39 462.4 463.4 464.4 466.48 468.84 476.39 478.49 480.4 486.86 490.7 498.74 502.86 504.44 506.46 520.58 522.46 524.57 530.7 535 538.54 551 552.87 566.51 576.85 594.5 600.87 610.52 622.82 624.6 625 626.31 640.65 696.77 7

57 770.7 773 801 953 1085.43 1457.74 1589.67 Lian Qiao - 43306.58 --- 793.2

Lian Zi - 282.46 284.48 286.32 290.27 291.3 295.4 296.53 299.4 300.26 302.24 30 4.25 311.4 312.53 313.39 316.26 318.23 328.49 330.5 340.58 346.29 348.52 350.45 35 4.3 368.64 412.69 414.71 432.38 442.37 448.38 456.7 464.38 478.36 508.43 576.85 57 8.52 608.72 610.74 624.77 638 710.81 808.96
Lian Zi - 16788.26 --- 835.8

Lian Zi Xin - 265.31 271.31 275.26 278.43 279.33 280.44 282.46 284.48 286.32 290. 27 291.3 295.4 296.53 297.43 299.36 300.26 302.23 304.25 311.37 312.53 313.39 314. 4 315 316.26 318.23 327.42 328.49 330.5 340.58 346.5 348.52 350.45 354.3 368.64 37 6.34 402.5 412.69 414.7 424.7 432.38 440.74 442.37 448.4 456.83 463.4 464.38 478.3 6 508.43 538.45 576.85 578.52 608.72 610.74 624.77 638 640.5 710.81
Lian Zi Xin - 22170.53 --- 406.2

Ling Zhi - 268.23 270.24 272.25 280.4 282.46 283.24 284.5 286.24 290.27 297.27 2 98.5 302.28 312.53 318.23 334.41 338.65 340.6 349.38 368.64 392.6 396.65 398.7 400. 7 402.52 404.55 408.62 410.63 414.53 420.6 426.72 428.65 430.74 436.8 439 441 446. 7 453 455 457 458.6 460.6 462.62 468.7 470.7 473 475 476.6 481 483 484.67 486.76 4 88.7 490.71 496.8 498.74 500.67 502.73 504.74 510.7 512.8 515 517 518.77 526.78 52 9 531 533 534.68 536.87 544.76 546.69 549 554.8 556.77 560.67 568.82 570.84 572.8 574.7 578.86 581.7 585 587 588.77 602.8 610.52 612.79 614.81 623 628.84 630.81 63 7.1 644.84 661.22 719 728.1 791 795 880.3 939 971.13 1356.4 Ling Zhi - 51140.81 --- 936.6

Liu Huang - 32.1 74.92 78.97 127.6 Liu Huang - 313.59 --- 313.8

Long Chi - 123.11 166.17 342.3 Long Chi - 631.58 --- 631.5

Long Dan - 258.23 265.31 271.31 274.23 286.24 302.19 318.4 342.3 356.32 358.34 362.37 371.4 374.34 376.36 388.41 390.38 404 418.35 426.72 440.7 448.4 457 462.4 5 04.44 506.8 518.46 522.7 524.5 538.8 586.54 595 602.54 610.74 624 638 680.68 684.9 700.9 782.7 798.7 831 842.84 844.77 847 1005
Long Dan - 23144.71 --- 423.9

Long Gu - 100.1 283.11 310.2 502.31 Long Gu - 1195.72 --- 439.8

Long Yan Rou - 342.3 376.36 610.52 1356.4 Long Yan Rou - 3431.25 --- 987. 9

Lu Dou - 206.24 474.46 648.9 716.11 Lu Dou - 2045.71 --- 752.7

Lu Gen - 232.32 234.33 238.37 242.23 246.35 248.36 250.33 265.35 267.24 271.24 280.32 282.33 286.24 300.26 302.24 314.29 316.26 330.29 344.32 346.3 360.3 371.4 3 74.34 376.4 378.38 388.4 412.7 426.72 427.62 429.6 430.7 431.7 445.68 457 462.4 46 3.65 468.75 477.63 479.65 492.4 608 623.82 738.9 869 1356.4

Lu Gen - 18350.51 --- 913.8

Lu Hui - 278.43 280.4 282.46 284.5 286.24 287.31 290.27 302.23 304.5 307.32 308.28 312.3 316.26 330.4 338.57 340.58 342.3 344.31 352.7 354.4 360.4 368.38 382.7 386.65 394.37 400.68 406.42 410.41 412.69 414.71 418.4 424.79 426.7 428.7 430.79 432.42 434.4 440.8 448.38 452.8 462.4 464.38 478 502.42 516.5 532.49 536.87 538.59 540.52 550.68 556.56 562.8 564.5 568.5 570.59 572.56 576.85 586.94 594.52 610.57 612.5 624.5 646.9 672.7 686.66 702.66 726.6 756.66 770.7 891.5 962.15 Lu Hui - 33460.12 --- 612.9

Lu Jiao - 100.1 283.11 310.2 Lu Jiao - 693.41 --- 693.6

Lu Lu Tong - 252.35 256.25 258.27 264.32 279.44 280.32 284.4 300.43 302.45 314.38 318.23 342.34 368.47 402.4 404.41 408.8 414.72 424.7 426.73 443 452.8 454.69 457 468.75 514.74 576.86 580.54 936.65
Lu Lu Tong - 11188.44 --- 557.1

Lu Xian Cao - 272.25 286.28 288.25 290.27 300.26 302.4 316.26 322.22 327.37 332.26 344.32 346.5 352.38 354.35 358.3 369.41 397.5 402.39 414.71 438.51 448.38 455.71 457 463.4 464.4 484.4 542.57 578.52 608.5 611 616.48 628.53 866.77 882.73 970.66 1701.2 Lu Xian Cao - 17596.44 --- 876

Luo Shi Teng - 254.45 256.42 264.36 270.45 284.5 286.24 296.41 302.23 304.25 310.43 328.3 338.44 342.3 352.43 354.44 358.4 368.47 372.41 374.38 388.41 400.68 405.44 412.7 414.71 426.72 432.38 448.4 464.38 468.75 520.53 535 536.52 550.6 578.52 594.52 610.52 712.69 726.64 801 947.15 1079.27 1109.3
Luo Shi Teng - 19584.14 --- 975

Luo Xuan Zao - 22.98 24.3 30.97 39.1 40.08 50.94 51.99 54.93 55.84 58.69 58.93 63.55 65.4 74.92 112.41 123.11 150.13 164.15 176.12 180.15 194.14 207 210.23 278.43 430.7 534.64 536.87 550.9 568.87 893.5 2781.3 Luo Xuan Zao - 8785.27 --- 437.4

Lv Cha - 176.12 194.19 199.7 290.27 342.3 430.7 450.7 458.37 536.9 724.15 Lv Cha - 3803.4 --- 514.8

Ma Chi Xian - 246.22 254.4 256.42 270.24 278.43 280.45 282.46 284.5 286.24 290.27 299.4 302.24 304.5 306.27 313.35 316.26 318.24 337.3 340.6 342.3 356.32 359.5 371.3 388.36 396.4 414.71 418.39 420.4 424.49 426.72 432.38 434.35 438.77 440.7 446.36 448.38 458.37 462.36 464.38 478 503.5 518.46 524.5 533.5 536.87 550.5 558.5 576.85 580.53 582.9 594.52 611 629.8 666 696 891 892.76 947.15 963.15
Ma Chi Xian - 26748.22 --- 489.9

Ma Huang - 228.37 230.26 244.33 256.42 268.26 269.37 270.45 272.25 278.5 279.4 280.4 282.55 284.5 286.24 288.25 290.27 296.6 298.55 300.26 302.24 303.24 304.25 306.27 308.5 312.53 314.29 316.4 322.27 324.63 330.29 336.34 337.44 338.65 340.6 3

44.32 354.35 356.37 358.3 360.31 366.71 380.73 382.62 386.39 394.76 400.68 407.5 4
08.79 410.8 412.7 414.71 416.38 424.79 426.5 432.4 437.5 438.81 442.72 448.38 452.
54 457 462.4 464.42 472.7 478.92 488.7 522.63 528.54 530.7 536.66 563.1 576.85 611
801 1356.4
Ma Huang - 28914.25 --- 529.5

Ma Qian Zi - 248.24 262.26 267.24 272.25 278.39 292.28 294.4 300.3 309.42 316.4
8 323.34 324.41 326.3 334.41 336.43 338.44 339.45 341.47 343.44 350.45 352.47 354.
44 364.44 369.48 370.48 374.38 376.36 380.48 385.7 388.4 390.46 392.49 394.46 396
404.5 410.5 412.7 414.71 418.4 424.5 426.72 432.64 434.4 442.72 444.73 456.7 478.7
527.54 529.56 530.57 541.57 552.65 562.6 574.83 576.69 608.77 610.79 626.79 628.8
634.6 793.94 947 983.14 1045.21 1109.3 1125.3 Ma Qian Zi - 30601.01 ---- 560.4

Ma You - 123.11 138.12 176.12 256.42 280.44 282.46 284.48 370.35 372.37
Ma You - 2283.87 --- 840.3

Mai Dong - 204.35 222.37 244.2 256.3 267.24 283.32 299.32 312.32 313.35 314.33
316.39 326.34 328.36 340.33 342.34 344.4 354.31 356.33 358.34 360.36 370.35 374.3
8 412.7 414.62 418.52 431 448.5 457 510.68 576.85 722.9 754.9 764.94 855 887 897 1
049.16 Mai Dong - 16490.1 --- 821.1

Mai Ya - 180.27 188.22 192.17 194.18 198.17 200.32 202.34 210.27 224.21 238.2 2
48.24 261.27 264.32 267.24 279.4 282.46 286.24 287.31 290.27 296.32 302.24 303.24
312.32 324.28 328.4 330.5 338.35 342.3 346.37 354.31 358.3 372.37 384.64 402.4 416.
6 418.35 430.7 432.38 441.4 446.7 448.4 452.19 457.43 486.65 504.4 558.9 576.85 57
8.52 580.68 595 608.72 611 631.7 792.1 859.7 880.3 884.88 1356.4 1701.2
Mai Ya - 25742.59 --- 471.6

Man Jing Zi - 254.41 256.42 262.21 264.4 270.45 272.47 279.4 280.45 282.46 284.
5 286.5 290.5 296.57 302.23 304.47 310.6 314.29 318.45 320.5 322.49 324.5 334.5 33
6.52 338.38 340.58 344.32 348.53 354.4 358.3 360.49 362.5 365 366.4 370.35 375 376.
36 377.58 379 388.4 406.6 412.7 414.71 416.68 426.72 428.7 430.7 432.38 436.8 448.
4 450.82 457.43 466.44 408.79 468.4 470.8 472.7 492.95 496.51 498.48 546.92 576.85
611 692.7 891.5 Man Jing Zi - 24831.56 --- 454.8

Mang Xiao - 58.44 120.37 121.13 136.14 146.14 252.1 322.2 368.64 468.4
Mang Xiao - 1993.56 --- 733.5

Mao Dong Qing - 198.17 224.3 418.4 442.72 457 472.7 488.7 498.74 502.68 530.5
2 540.51 574.83 586.8 636.5 678.68 Mao Dong Qing - 7251.25 --- 361.2

Mi Cu - 60.05 --- 163.2

Mi Meng Hua - 238.28 263.31 270.24 284.34 286.24 300.3 316.31 358.3 362.33 386.
65 388.37 399 418.35 426.72 432.4 442.4 448.4 468.84 472.78 478.45 482.43 488.83 5
08.52 522.5 550.51 522.5 578.52 592.5 594.52 625 654.68 738.7 756.7 770.73 781.1 8

66.8 913.23 1025.32 1063.32 1073.3 1089.42 1092.2 1105.3 1731.53 Mi Meng Hua - 26570.17 --- 486.6

Mi Tuo Seng - 239.26 --- 239.5

Ming Fan - 414.21 528.35 Ming Fan - 942.56 --- 942.6

Mo Han Lian - 248.73 256.42 268.5 270.24 272.25 278.41 280.44 282.46 284.26 286.24 288.42 291.34 292.4 296.53 300.26 302.23 310.39 314.25 320.48 354.3 358.3 368.46 384.64 386.65 396.7 412.69 414.71 426.72 432.38 435.51 448.4 456.7 462.36 473 488.7 502.7 518.7 592.54 606.9 610.52 628.75 634.84 664.8 959.26 1018.19 1243.34 1345.43 Mo Han Lian - 21470.44 --- 393.3

Mo Yao - 258.36 260.4 262.4 264.45 267.32 271.31 272.52 274.39 276.37 278.48 280.45 282.55 283.24 285.34 286.24 288.57 289.24 290.48 294.82 302.6 304.57 311.29 312.8 314.51 316.58 317.27 318.56 320.42 324.6 325.27 326.52 328.59 330.56 342.3 344.54 346.62 348.58 352.5 353.37 354.5 362.5 368.38 376.36 379.5 386.65 400.68 402.63 408.79 412.7 414.71 416.64 418.65 422.81 424.7 426.72 428.82 432.64 434.73 438.86 440.79 441.4 442.85 444.82 446.5 448.4 452.59 456.78 458.8 460.82 462.7 464.41 468.75 469.63 470.86 472.83 476.82 478.4 480.6 482.87 486.86 492.82 498.56 500.89 503.15 504 515.6 516.89 518.86 520.4 528.5 534.86 552.7 554.8 576.9 586.94 595.5 604.9 612.5 620.86 623 624.9 625.61 638.98 646.9 767 769 771 783 785 801 815.41 917 927.1 933 947.15 957.1 961.1 963.2 979.2 1033.2 1065 1079.3 1109.3 1121.3 1151.3 1165.48 1211.4 1241.59 1271.4 1356.4 2122.51 Mo Yao - 71132.89 --- 479.4

Mu Bie Zi - 194.18 212.37 242.4 254.41 256.42 278.43 280.5 282.5 284.5 296.49 298.5 310.51 312.53 340.6 380.73 404.5 412.7 414.71 424.7 426.72 430.71 440.7 457 470.69 478 484.74 486.76 506.93 536.87
Mu Bie Zi - 10600.8 --- 527.7

Mu Dan Pi - 246.26 265.26 270.28 279.29 282.46 286.28 288.29 290.27 300.44 302.24 304.25 314.33 316.3 328.31 330.41 332.38 334.4 336.37 344.4 356.4 372.5 386.4 414.71 416.81 426.5 432.6 434.35 442.7 448.4 444.69 454.76 457 460.43 463.4 464.42 480.46 484.4 492.57 494.5 496.46 522.6 524.6 552.7 566.7 576.85 584.57 600.6 610.52 612.53 616.6 648.67 680.7 716.8 732.9 748.8 822.9 940.7
Mu Dan Pi - 26136.42 --- 478.8

Mu Gua - 270.5 272.25 276.4 278.34 279.4 280.4 282.5 284.52 290.44 294.5 295.29 296.5 298.5 302.23 304.25 310.51 318.23 328.44 354.31 358.3 380.73 382.62 390.38 414.71 422.81 426.72 428.6 434.39 442.7 448.4 452.8 454.47 456.7 457.43 464.38 468.75 472.7 478.7 505.45 508.43 536.87 576.85 578.52 582.59 610.5 616.82 618.8 664.82 678.68 866.77 868 1701.2 Mu Gua - 23768.1 --- 435.3

Mu Li - 283.11 310.2 332.26 432.38 464.38 588.77 610.52 616.87 Mu Li - 3638.49 --- 492.6

Mu Li Rou - 307.33 426.72 Mu Li Rou - 734.05 --- 734.1

Mu Tong - 192.17 194.18 200.32 204.35 216.32 220.35 244.24 254.4 256.42 262.2 1 280.44 284.5 287.24 288.25 302.24 304.25 311.3 312.4 340.6 341.31 342.4 347.32 3 52.7 354.3 357.27 368.33 376.4 392.49 410.8 412.7 414.71 418.4 420.5 422.47 426.72 440.66 442.7 454.7 456.7 457.43 470.6 472.7 478.45 481 485 486.68 488.5 516.45 519. 41 546.92 564.49 576.85 581.5 588.77 604.81 611.5 618.8 624.77 704.89 720.89 751 8 83.1 927.1 1149.48 1205.38 1367.52 1399.52 Mu Tong - 32193.27 --- 589.8

Mu Xiang - 250.33 252.35 254.49 256.42 262.34 264.32 280.44 284.26 290.4 294.3 8 300.22 322.6 330.4 338.65 345.43 346.37 347.45 352.7 354.31 362.42 366.71 372.4 379.5 380.73 406.4 408.79 410.42 414.71 470.7 410.51 412.7 414.71 426.72 430.7 442. 72 457 494.62 546.6 568.57 586.94 665.13 693.18 1085.43 1307.46 Mu Xiang - 1864 3.63 --- 928.2

Niu Bang Zi - 194.31 196.39 198.39 200.32 204.35 206.32 208.25 210.4 212. 41 216.19 218.33 220.35 226.44 228.41 230.3 234.42 238.5 240.5 242.4 248.32 254.49 256.42 267.24 270.45 278.34 280.4 281.26 282.55 284.5 286.24 294.47 296.57 298.5 3 02.23 310.6 312.53 324.63 338.65 340.6 354.31 358.4 366.71 368.64 370.39 372.41 37 6.36 400.42 410.72 414.71 416.42 424.7 426.7 446.49 448.38 450.39 456.7 458.5 478 502.7 516.7 518.7 530.7 535 536.87 546.7 550.6 555 569 574.83 576.85 592.7 650.8 6 65 694.8 714.75 732.77 742.81 750.78 811 812.9 827 868 989.1 Niu Bang Zi - 3410 1.38 --- 624.6

Niu Huang - 235.24 238.24 300.26 316.26 330.5 332.52 358.34 360.57 362.55 376.6 379 386.65 392.57 396.65 406.6 408.6 414.72 422.62 449.62 456.7 457.43 462.4 465.6 2 474.72 490.5 499.7 514.52 515.7 516.8 522.46 528.72 580.6 581.7 582.71 584.73 60 6.6 641 642.56 671 672.59 718.66 720.63 740.9
Niu Huang - 20517.06 --- 375.9

Niu Xi - 254.49 256.42 261.36 263.37 268.5 270.24 278.34 284.5 286.24 296.57 30 2.23 310.6 321 324.63 334.41 336.4 337 343.4 352.4 388.65 381.5 402.44 404.45 412. 77 414.79 416.6 426.72 428.77 430.71 442.7 446.36 448.38 454.68 457 458.5 462.69 4 63.4 466.68 472.78 481 488.7 496.71 505.57 568.5 570.79 574.93 576.85 588.81 610.5 619 628.84 632.92 634.94 646.95 648.92 689 719 750.91 753.1 765 767.1 785 793.1 7 94.97 795.1 807.1 809.11 823.14 835.1 837.12 849.18 851.2 879.21 913 927.1 939 955. 22 957.24 969.25 971.27 985.25 997.26 999.28 1011.34 1013.36 1041.37 1119.2 1161. 44 Niu Xi - 52900.62 --- 969

Nv Zhen Zi - 279.33 280.44 284.31 286.24 287.35 288.25 290.4 292.37 294.39 296. 4 300.3 302.23 304.25 316.48 318 324.5 330.4 336.4 337.33 338.4 342.5 343.5 346.46 350.5 352.47 353.41 356.41 358.45 360.44 367.39 368.64 372.4 374.38 378.41 380.5 3 82.5 386.44 388.51 390.4 394.5 396 404.55 406.47 410.4 418.4 424.5 426.72 432.64 4 34.44 438.5 444.73 448.4 450.39 452.4 457 470.8 472.7 484.67 486.77 488.7 490.5 49 8.74 504.7 514.74 524.51 526.81 534.5 535.7 538.54 540.57 542.59 554.5 556.51 566. 51 568.57 570.5 576.85 585 594.52 610.52 618.84 625 626.52 631 634.8 638.7 687 69

6.8 703 724.7 740.66 742.72 756.66 801.7 927.1 953 1085.43 Nv Zhen Zi - 45814.17 --- 839.1

Ou Jie - 251.24 265.31 271.31 306.27 336.4 337 338.4 342.4 352.4 372.37 440.65 608.72 610.74 624.77 638 1079.27 Ou Jie - 7175.25 --- 971.1

Pei Lan - 253.21 262.3 266.37 278.38 280.36 285.38 286.24 288.37 289.4 290.4 296.5 303.35 306.35 310.34 320.37 322.35 324.98 346.3 362.4 376.4 392.4 410.8 412.7 414.4 420.45 426.72 442.72 444.73 468.75 484.36 492.43 550.68 634.5 664.62 665.13 782.53 802.56 1085 Pei Lan - 16045.23 --- 798.9

Pi Pa Ye - 254.41 262.4 264.45 268.5 278.34 282.55 284.5 286.24 290.27 294.47 295.29 296.5 300.26 302.23 310.6 312.57 316.26 324.63 354.31 368.3 370.49 380.39 382.5 386.44 414.71 432.38 442.72 448.4 452.41 456.7 457.43 458.4 463.4 464.41 470.7 472.78 486.81 488.78 502.62 504.78 516.65 518.62 530.73 532.58 534.86 576.85 580.53 594.52 596.5 610.52 614.6 626.52 634.93 636.5 648.87 650.98 664.9 676.89 690.87 724.71 784.77 823 866.83 Pi Pa Ye - 29521.06 --- 540.6

Pu Gong Ying - 256.42 262.3 264.32 266.33 267.32 278.43 280.45 284.5 286.24 296.53 302.28 318.24 340.58 354.31 376.36 388.37 398.36 412.7 414.71 424.4 426.72 430.71 432.38 448.38 450.6 463.4 464.38 474.4 516.45 584.87 610.56 742.72 1356.4 1801.6 Pu Gong Ying - 15676.72 --- 780.6

Pu Huang - 256.42 268.48 270.45 272.25 284.5 286.24 302.24 304.5 308.28 316.26 330.5 348.48 352.7 354.4 358.3 360.4 368.38 382.7 414.71 416.7 424.79 428.7 432.38 440.8 448.4 452.84 457 463.4 464.38 526.83 536.9 540.9 550.68 568.9 576.85 585.15 586.94 594.52 610.57 618.8 624.54 653.12 756.66 770.7 891.5
Pu Huang - 20563.14 --- 376.8

Qian Hu - 262.26 264.27 267.24 268.22 270.28 274.31 276.3 281.35 284.5 288.38 290.27 291.3 294.34 296.57 298.25 300.3 301.39 302.23 304.32 308.33 311.42 312.53 328.4 333.38 342.4 344.4 346.37 354.31 366.5 368.64 372.37 386.4 396.7 400.7 408.4 412.69 414.71 424.7 426.5 428.5 430.49 442.7 446.4 450.39 452.8 454.7 456.7 462.4 472.7 473.95 486.68 488.7 489.61 520.66 524.57 526.57 550.69 552.7 566.73 576.85 602.58 609 611 624.77 726.63 767 768.78 785 800.83 1045.2 1087.2 1207.3 1237.38
Qian Hu - 33904.09 --- 621

Qian Jin Ba - 202.34 204.35 206.2 222.37 252.39 254.24 256.25 264.4 270.24 278.34 282.46 284.26 310.26 312.4 320.29 330.5 340.6 368.64 382.7 396.7 402.4 404.5 406.47 410.7 412.7 422.5 424.7 426.7 430.4 434.48 438.77 466.44 482.4 430.4 434.48 438.77 452.8 466.44 470.7 478.5 482.44 580.53 602.9 634.9
Qian Jin Ba - 16775.95 --- 835.2

Qian Nian Jian - 256.43 272.43 282.47 290.27 298.47 316.26 322.54 358.3 370.58 372.6 373 374.62 382.5 400.5 414.71 438.4 450.39 454.7 488.7 534.64 546.6 576.85 618.84 650.84

Qian Nian Jian - 9845.64 --- 490.2

Qian Niu Zi - 240.5 254.33 256.42 260.37 264.32 270.33 278.43 280.45 282.46 284.5 286.24 288.48 291.3 294.39 316.39 324.4 330.38 332.39 346.42 348.39 354.35 360.44 362.42 364.39 368.38 378.42 414.71 430.6 454.7 457 464.7 484.4 508.57 576.85 634.74 698.8 979 1023.1 1169.21 1197.44
Qian Niu Zi - 17513.11 --- 872.1

Qiang Huo - 258.27 260.37 262.4 264.4 268.3 270.5 272.29 276.4 279.4 280.45 282.55 284.5 286.5 288.29 291.4 294.47 295.29 296.5 298.5 300.3 302.35 304.29 310.6 312.53 314.41 316.5 324.54 326.56 328.4 330.42 332.43 336.4 338.4 339.6 340.6 342.3 352.42 354.61 356.37 359.4 363.6 364.3 368.64 370.31 382.7 390.5 396.7 404.41 408.4 410.7 414.71 418.5 424.7 426.5 432.6 438.77 446.49 452.8 454.7 457.43 470.8 478 488.74 495 504.4 515.8 524.57 534.61 576.85 584.6 586.94 608.6 612.5 691 802.6 891.5
Qiang Huo - 29828.18 --- 546.3

Qin Jiao - 192.17 234.25 271.31 287.3 292.33 301.3 303.4 317.3 319.39 347.4 356.32 358.34 359.5 371.3 374.34 376.36 390.38 396.4 414.62 416.6 418.44 420.4 424.7 426.72 432.38 436.4 438.77 440.7 448.38 457 470.5 480.63 484.5 487 515.81 518.46 524.5 558.53 576.85 629.8 742.72 875 891 892.76 876.76 947.15
Qin Jiao - 21496.17 --- 393.9

Qing Ban Xia - 190.24 194.18 202.25 204.35 220.35 242.23 243.22 244.2 254.24 256.42 267.24 268.23 278.34 280.44 283.24 297.33 323.39 358.38 360.4 412.69 414.71 426.72 576.85 624.59
Qing Ban Xia - 7424.23 --- 369.6

Qing Dai - 286.28 290.31 293.27 295.29 360.41 362.42 363.38 368.65 406.39 408.8 414.7 418.35 432.38 434.35 446.46 448.38 466.88 490.52 594.52 Qing Dai - 7581.74 --- 377.4

Qing Fen - 472.09 --- 472.2

Qing Feng Teng - 234.33 264.32 266.33 270.5 281.3 282.12 286.24 287.32 297.35 298.25 303.36 307.3 313.35 324.3 327.37 328.4 329.4 330.37 337.4 339.4 340.31 341.4 342.4 351.35 354.44 355.43 356.5 381.85 384.13 398.14 412.7 414.71 418.44 424.47 425.4 441.58 448.38 470.5 485 564.49 574.83 594.7 608.72 610.52 622.3 622.75 648.8 656.76 658.33 692.7 742.8 767.1 977 1573.71
Qing Feng Teng - 24471.35 --- 448.2

Qing Hao - 248.36 250.33 256.42 262.43 266.33 270.25 280.32 282.33 284.35 286.24 289.4 290.48 294.3 300.26 302.23 303.35 306.27 314.29 316.28 318.5 330.29 332.26 344.32 346.3 354.35 358.3 360.31 368.64 374.34 384 388.37 390.72 412.7 418.44 424.79 426.7 428.73 430.45 432.38 442.72 443.7 444.52 446.5 448.38 450.98 457.73 462.4 463.4 464.38 468.75 476.52 478.44 564.49 579 586.94 593.5 595 657 742.72 887.62

940.68 952.64 Qing Hao - 26077.12 --- 477.6

Qing Meng Shi - 119.1 140.69 Qing Meng Shi - 259.79 --- 259.8

Qing Pi - 104.17 117.15 134.22 136.23 150.22 180.16 196196.29 200.32 204.35 23 3.19 258.23 272.25 287.31 302.28 303.24 372.37 386.65 402.4 412.69 426.72 448.4 46 4.38 581 611 Qing Pi - 7185.22 --- 972.4

Qing Xiang Zi - 256.42 297.37 342.3 355.42 362 398.4 399 412.7 414.71 418.35 43 2.4 457 486.76 500.79 502.76 516.79 558.7 576.85 635 662.8 678.8 795 841.1 887.93 978 1025.32 1063.32 1091.50 1092.2 1103.35 1117.2 Qing Xiang Zi - 19660.24 --- 978.9

Qu Mai - 234.34 256.43 268.5 270.24 284.31 285.23 287.24 288.25 296.54 301.29 303.24 304.25 318.35 333.38 412.7 426.73 432.4 448.4 456.71 463.37 464.4 470.74 48 6.74 502.76 547.64 576.86 600.7 610.52 676.8 711.85 796.95 810.97 827 973.12 985.3 1135.24 Qu Mai - 17849.49 --- 888.6

Qu Qu Hua - 223.23 423.5 532.7 Qu Qu Hua - 1179.43 --- 433.8

Quan Xie - 256.42 284.5 386.65 499.79 562.8 586.94 756.92 891.5 4010.8 7079.9 Quan Xie - 15316.22 --- 762.6

Ren Dong Teng - 204.35 212.24 220.35 222.37 228.37 250.33 254.24 256.42 264.3 2 267.24 270.24 278.43 280.44 281.27 282.29 283.24 284.5 286.24 296.53 300.26 302. 24 306.48 314.46 330.29 342.34 354.31 358.34 368.33 372.37 376.35 388.4 390.38 40 2.65 404.37 432.38 434.43 448.4 456.7 464.38 472.61 516.45 530.48 536.87 538.46 57 6.85 583.58 594.52 610.52 627.59 751 767 913.1 929.1 1045.21 1059.24 1075.24 1087. 25 1091.24 1117.27 Ren Dong Teng - 27894.85 --- 510.9

Ren Shen - 190.2 192.12 194.36 196.39 198.39 199.33 202.34 204.39 212.41 214.3 9 218.23 219.24 220.35 222.4 227.28 226.44 228.24 230.26 238.37 240.5 241.39 242.4 244.37 254.41 256.47 258.36 260.4 263.33 264.32 267.32 268.5 271.31 276.37 278.4 2 80.45 282.55 283.24 284.5 285.34 286.24 288.25 289.24 290.4 294.82 296.6 302.26 30 4.5 311.29 312.83 314.3 316.26 324.5 325.27 335.28 336.4 342.3 346.5 353.37 368.64 376.36 378.38 379.5 390.6 400.68 408.79 412.73 414.71 416.6 418.35 432.51 434.39 4 36.54 440.79 441.4 448.4 450.39 452.59 456.7 460.82 462.4 464.46 469.63 470.76 476. 73 485 498.56 503.15 504.44 507.18 514.78 515.6 520.4 552.7 576.85 586.94 604.9 61 2.53 618.88 620.9 623 624.77 638.9 646.9 767 769 771 781 783 785 801 807.32 813.2 4 820.7 837.26 839.28 841.29 843.31 917.13 924.8 927.1 933.13 947.15 957.1 961.14 962.15 963.2 967 979.2 1033.2 1065 1079.3 1081.2 1095.27 1109.3 1111 1121.31 115 1.33 1165.48 1195.51 1211.59 1241.41 1271.43 1355.4 1356.4 2122.51 Ren Shen - 79695.04 --- 537

Ren Shen Ye - 244.37 254.49 256.42 260.37 263.33 264.45 267.24 268.52 270.49 278.43 280.44 282.55 283.24 284.5 286.5 294.47 296.5 302.23 308.5 312.53 316.26 32

0.62 325.27 328.27 330.5 340.58 353.37 354.31 358.3 370.57 372.37 376.36 392.64 40
0.68 410.72 412.69 414.71 416.46 432.38 441.4 444.73 448.38 456.7 458.8 460.77 462.
79 464.4 474.8 476.73 478.92 492.95 494.84 508.82 576.85 592.5 604.9 610.52 620.86
623 637 638.9 652.9 654.87 663 670.9 767 770.1 770.99 783 785 801 917.13 931.2 94
5.1 947.15 949.27 963.2 1065 1079.27 1109.3 2781.3 Ren Shen Ye - 43062.87 ---
788.7

Rou Cong Rong - 198.39 202.29 204.65 220.35 222.37 240.5 256.47 258.35 268.52
270.24 281.26 282.55 284.5 287.24 296.57 298.5 299.36 300.3 302.45 304.5 310.2 311.
33 320.42 326.6 330.33 332.35 342.3 344.36 346.33 348.35 360.36 364.35 368.38 372.
37 374.34 376.36 390.6 414.71 418.44 422.8 430.4 436.8 438.81 446.5 452.8 462.45 4
72.44 475.62 476.47 488.4 504.48 576.85 592.6 608.59 622.6 625 625 638.61 650.62 6
52.64 666.69 680.6 742.72 770.73 786.73 800.75 814.78 828.8 829.28 838.8 891.5
Rou Cong Rong - 31783.7 --- 582.3

Rou Gui - 254.49 268.52 270.5 278.34 279.4 280.4 282.55 284.5 294.39 296.57 30
0.3 310.6 358.4 426.72 442.4 478.44 578.52 604.8 606.6 740.66 751.1 866.8 1045.21 1
161.49 1731.53 1794.12
Rou Gui - 14987.35 --- 746.1

Ru Xiang - 254.24 256.42 268.48 270.24 272.52 284.44 286.24 288.42 290.48 302.
45 306.48 312.53 314.46 322.48 330.5 334.55 340.56 348.52 396.65 414.41 424.7 426.
8 428.77 438.76 442.8 448.38 454.76 456.7 458.85 460.82 468.75 470.68 472.7 498.82
512.72 526.79 540.6 623 696.83 Ru Xiang - 15447.3 --- 769.2

San Bai Bang - 252.3 576.85 740.92 869 San Bai Bang - 2439.07 --- 897.3

San Leng (Ling) - 254.41 268.26 270.24 280.45 282.46 286.24 306.4 310.51 330.5
366.4 412.7 414.71 418.35 422.47 426.72 440.7 442.72 456.7 458.8 466.39 468.75 470.
6 472.7 550.72 576.85 608.5 610.52 624.54 627.5 665.13 710.86 751 773.7 875.8 883.
1 925.24 967.14 987.18 1001.1 1003.1 1045.21 1075.24 1135.36 1147.2 1149.2 1207.5
2 1353.68 1763.86 1801.6 San Leng - 33549.03 --- 614.4

San Qi - 198.39 200.32 202.29 204.39 212.41 226.44 240.5 244.37 260.37 268.5 27
0.5 271.31 275.3 276.33 278.39 279.29 282.55 284.5 285.4 287.3 288.5 292.33 293.4 2
94.5 296.57 298.5 301.3 302.23 303.4 304.5 305.41 307.39 308.5 310.6 311.5 313.5 31
6.5 317.3 318.24 319.39 325.27 326.6 327.5 337.5 339.5 342.6 347.4 350.3 352.42 35
4.15 359.8 365.6 367.6 369.6 370.4 390.6 394.6 410.41 412.7 414.71 418.44 427 428.7
436.8 444.73 452.59 457 460.82 468.5 470.5 472.53 474.7 476.73 478 484.5 487 500.5
528.6 542.68 568.87 576.85 580.8 586.94 594.7 607.78 610.5 617 623 624.77 638.9 65
0.54 716.9 755 769 771 785.01 801 817 835 917.13 933.13 947.15 949.13 957.11 961.
14 963.2 989.19 1015.2 1079.3 1093.3 1109.3 1123.3 1125.3 1141.3 1155 1233.47 124
1.59 1247 1271.44 1374 1447.3 San Qi - 65126.53 --- 438.9

Sang Bai Pi - 240.25 242.4 244.34 264.45 268.5 271.24 276.2 280.4 284.5 286.28 2
87.24 289.4 294.5 296.57 298.5 300.26 302.24 303.35 306.48 308.33 310.6 312.4 314.

34 316.26 318.23 320.25 324.63 326.34 329.5 330.29 332.38 336.34 338.65 340.37 35
2.7 354.61 358.3 366.71 376.4 380.73 388.4 392.53 400.68 404.4 406.47 410.72 412.7
3 414.71 416.7 418.44 420.5 422.81 424.49 427 430.79 434.3 436.5 438.51 448.4 456.
7 457.43 458.5 464.41 472.44 478.44 481 484.36 486.47 489 491.6 504.7 507.6 552.58
558.53 560.5 562.57 566.56 568.52 570.6 574.53 576.85 578.52 580.58 582.6 590.53 5
92.55 594.56 595.58 600.52 610.66 612 616.52 626.61 646.72 648.7 650.71 662.72 67
8.72 693 694.72 700.71 708.71 710.72 716.81 730.74 742.72 752.63 760.82 768.63 77
6.82 788.7 840.91 Sang Bai Pi - 52513.87 --- 961.8

Sang Ji Sheng - 252.35 253.88 267.24 286.28 302.24 330.41 344.3 378.42 414.71
426.72 434.35 448.4 457 468.75 552.7 592.55 618.8 Sang Ji Sheng - 6829.1 ---
924.3

Sang Shen - 256.43 264.27 268.53 278.44 279.4 280.45 282.56 284.5 286.24 287.
24 288.25 296.58 298.25 302.24 304.25 310.3 318.24 328.41 330.38 352.7 354.31 356.
5 368.34 376.36 380.74 390.23 394.77 410.73 412.62 422.47 433.39 446.67 448.38 44
9.39 457.43 481 536.89 576.85 579.53 595.53 610.52 611.5 619.2 626.52 677.94 734 8
67.15 880.3 976.97 1356.4 1466.1 1573.73 1701.21
Sang Shen - 27471.33 --- 503.1

Sang Ye - 276.4 278.38 280.5 281.26 282.55 284.5 286.5 290.27 294.47 296.57 29
8.5 300.26 302.4 304.5 306.48 307.34 308.33 310.6 311.33 312.53 316.26 318.35 320.
51 324.37 326.34 330.29 332.38 336.34 338.65 339.39 340.6 342.34 347.32 348.48 35
2.7 354.31 358.3 366.71 368.33 374.34 376.36 378.46 380.73 382.7 386.44 392.49 394.
76 396.7 400.68 402.65 404.45 408.79 410.72 412.69 414.71 416.7 420.45 422.47 424.
7 426.72 430.7 436.45 438.47 440.78 441.4 444.73 448.4 456.7 457.43 458.37 460.43
463.37 464.4 466.68 468.75 470.7 473.44 478 481 487.46 504.4 512.46 532.84 536.87
538.5 540.67 546.92 552.61 556.7 560.6 562.6 564.49 576.85 580.53 586.94 594.52 61
0.52 620.7 623 626.6 628.84 646.72 664.69 678.72 693 694.72 708.7 718.6 742.72 760.
82 785 788.7 801 819 879.38 947.15 957.1 1033.2 1065 1075.39 1079.3 1109.3 1151.3
1165.3 1271.4 1356.4 1399.52 2122.51 Sang Ye - 68044.81 --- 458.4

Sang Zhi - 244.24 252.26 256.42 262.21 271.31 272.25 280.44 286.24 288.38 290.
27 302.24 304.25 306.27 308.33 310.34 311.3 312.4 316.26 318.23 324.37 325.31 326.
39 328.3 330.3 336.34 340.37 341.27 342.3 347.32 354.4 356.4 358.4 360.44 368.33 3
76.4 378.46 392.49 394.42 404.45 406.42 408.49 418.44 420.5 422.47 424.49 430.7 43
6.45 438.47 441.4 442.72 448.38 456.7 457.43 458.5 464.38 470.8 481 488.5 490.6 49
2.6 504.44 508.6 536.87 560.63 562.56 564.49 568.7 576.85 580.53 591 594.52 610.52
626.6 646.72 667 678.72 694.72 708.71 742.72 840.91 1085.43 1399.52 Sang Zhi
- 36830.3 --- 674.7

Sha Ren - 220.35 222.41 226.44 228.37 238.41 240.38 242.4 244.28 246.31 254.49
256.42 262.4 264.4 266.5 268.5 272.52 278.34 280.53 282.55 284.5 285.34 294.47 296.
5 298.38 299.5 300.26 302.23 311.4 312.53 314.3 317.29 320.51 322.5 330.29 332.44
339.39 354.7 368.7 369.41 394.76 396.73 408.79 412.7 414.71 426.72 428.77 430.7 43
2.4 438.81 440.79 448.4 452.4 454.73 460.5 462.36 463.4 464.4 474.5 476.5 484.36 49

0.93 550.68 576.85 610.5 640.7 668.73 682.75 1871.35 Sha Ren - 26510.56 --- 4
85.7

Sha Shen - 186.16 Sha Shen - 186.16 --- 186

Shan Jin Che - 306.42 Shan Jin Che - 306.42 --- 306.6

Shan Yao - 244.29 254.33 256.42 263.31 264.32 267.24 273.33 274.31 284.31 288.
34 304.25 316.48 317.34 340.4 356.41 362.33 372.45 386.65 388.67 394.4 396.72 398.
66 400.76 402.7 412.7 414.71 428.5 430.69 444.72 446.7 485 552.87 556.81 562.92 57
6.76 582.9 592.7 660 688.94 738.9 869 885 1063.33 1077.3
Shan Yao - 20278.87 --- 371.4

Shan Zha - 256.3 278.43 280.45 284.5 286.24 290.27 302.23 306.27 308.5 342.3 3
54.31 368.38 392.62 396.65 410.72 414.71 426.72 432.64 440.74 442.37 450.39 454.7
3 456.74 457.43 463.4 464.38 466.69 468.71 470.73 472.7 482.78 484.71 486.73 487.8
500.67 524.73 530.6 550.68 576.85 578.52 586.94 594.57 610.5 628.5 658.9 866.77 89
1.5 1731.53 Shan Zha - 23414.53 --- 429

Shan Zhu Yu - 223.35 226.44 228.37 234.33 236.35 238.28 240.5 242.36 248.25 252.
26 254.51 255.44 264.45 266.5 268.52 270.45 271.7 272.48 278.4 280.5 281.48 282.5
283.49 284.5 286.5 294.5 296.6 302.23 306.48 308.6 310.6 316.99 328.3 330.5 332.26
334.6 337.58 338.74 342.6 346.3 352.4 353.4 354.31 358.34 360.31 368.4 374.34 376.
36 378.7 388.4 390.6 402.65 404.4 406.38 410.72 412.7 414.71 420.45 424.7 426.72 4
32.51 442.4 454.68 457 462.4 463.4 464.38 468.75 470.76 472.7 478.4 484.4 490.93 5
42.49 548.92 576.85 586.94 592.7 610.5 622.7 634.45 636.51 778.75 788.6 938.66 939
940.68 954.66 1087 1356.4 1571.1 1577.15 1725.22 1857.37 2339.64 2342 Shan Zh
u Yu - 49668.78 --- 909.9

She Chuang Zi - 244.28 246.26 254.49 256.42 258.27 260.28 267.24 268.5 270.45
274.27 276.28 278.3 280.4 282.55 284.5 286.28 288.29 290.27 292.28 296.57 298.38 3
00.26 310.51 312.53 314.33 316.35 328.36 330.4 333.38 335.5 336.47 337.5 339.6 358.
4 364.3 367.6 368.64 372.41 374.38 386.4 390.34 396.7 400.68 404.37 408.79 412.7 4
14.71 424.7 426.5 448.91 478.9 488.7 502.7 540.67 618.84 622.75 903.1 919.1 937.1 9
51.1 1065 1107.24 1149.48 1227.34 1243.34 She Chuang Zi - 29125.64 --- 533.4

She Gan - 120.15 124.14 136.15 138.16 142.2 144.21 152.15 166.17 168.23 170.1
2 178.23 196.2 208.12 220.35 228.37 258.29 270.25 284.26 286.25 298.26 300.28 302.
3 314.31 316.28 328.35 330.31 332.58 347 358.37 360.34 362.61 363.4 364.5 368.5 37
2.35 379 382.49 386.73 402.4 412.77 418.35 422.37 428.82 432.41 442.75 448.4 456.7
460.78 462.44 464.38 468.74 474.8 486.76 490.51 492.47 514.5 516.8 522.45 528.8 54
3 562.92 574.93 576.85 586.67 602.63 604.64 606.6 620.47 641 642.56 648.74 671 67
2.59 677.12 685.2 954.66 She Gan - 30896.1 --- 565.8

She Xiang - 256.25 272.38 284.39 286.4 288.42 290.4 292.5 302.24 330.46 332.48
344.36 384.63 386.65 394.4 402.7 414.62 454.65 492.1 562.8 1031.2 She Xiang - 78

04.03 --- 388.5

Shen Jin Cao - 194.18 196.29 204.36 208.34 220.36 222.37 226.45 228.38 240.5 2
42.4 245.36 247.38 254.41 259.34 261.36 263.37 268.5 277.36 278.52 279.37 282.55 2
84.5 291.4 295.37 310.61 323.4 324.64 330.25 349.5 362.41 381.5 410.8 412.7 414.72
422.81 430.41 432.38 442.73 450.7 456.7 458.73 462.4 466.8 467.6 470.74 472.7 474.
7 488.7 492.7 524.57 536.96 576.85 767.1 990.86 1221.39
Shen Jin Cao - 21101.48 --- 386.4

Shen Qu - 381.5 Shen Qu - 381.5 --- 381.6

Sheng Di Huang - 202.2 208.21 236.65 244.2 267.24 283.24 300.3 314.38 342.34 3
46.37 362.33 388.5 390.47 400.68 414.71 480.6 552.78 576.85 625 638.6 652.64 686.6
786.73 1179.41
Sheng Di Huang - 10881.03 --- 541.8

Sheng Jiang - 194.23 196.29 198.3 202.33 204.35 220.35 222.37 232.32 236.39 25
2.26 254.4 256.42 264.4 266.46 268.35 270.28 271.31 272.5 274.35 276.4 278.4 279.3
3 280.4 281.48 282.46 284.48 286.28 287.35 290.48 292.37 294.39 296.53 302.23 304.
4 307.4 310.43 312.53 318.45 320.42 322.44 324.5 326.39 330.4 336.42 337.33 338.4
343.5 346.46 350.5 352.51 353.41 356.41 358.45 360.44 366.4 368.64 370.4 374.43 37
6.36 380.5 382.5 386.44 388.51 390.43 394.5 396 404.45 406.47 408.79 410.4 412.7 4
14.71 416.46 418.48 422.81 424.5 430.7 432.64 438.5 452.8 454.7 460.52 470.8 484.6
7 490.54 494.49 504.7 510 534.5 535.7 540.5 566.51 610.52 638.7 676.79 680.82 868.
7 953 1085.43 1701.2 Sheng Jiang - 39313.74 --- 720.3

Sheng Ma - 242.4 244.24 254.24 256.21 260.24 268.5 276.28 280.4 284.5 286.24 2
92.28 298.29 306.31 316.3 324.63 352.7 356.36 366.71 367.35 369.5 372.37 382.45 38
3.4 399.44 412.7 414.71 426.7 444.67 448.4 452.45 456.68 458.7 468.74 469.73 470.7
6 475.54 478.74 480.46 484.74 487 488.73 502.76 504.78 505.51 522.6 524.57 526.49
529 530.82 532.79 546.82 548.84 556.81 574.83 576.85 588.73 590.74 600.87 602.89
603 617 618.89 620.86 632.82 634.8 636.91 651 658.82 660.93 663 674.82 677 678.95
680.97 688.94 692.98 704.9 752.9 781 797 799.1 822.93 825 841.11 843 945.1 1121.2
6 1356.4 Sheng Ma - 46908.88 --- 859.2

Shi Chang Pu - 200.32 204.39 208.25 212.24 216.19 218.37 220.39 222.37 224.33
228.37 232.3 234.38 236.35 238.37 246.22 254.24 256.42 270.28 278.34 280.44 284.2
6 286.24 290.48 300.26 313.35 354.35 358.3 372.45 386.44 388.45 416.56 418.48 424.
7 426.72 429.6 448.51 542.66 564.49 578.5 594.52 608.5 624.7 627.5 773.7 875.8 105
4.15 Shi Chang Pu - 17426.23 --- 867.6

Shi Gao - 186.96 --- 186.9

Shi Hu - 279.37 284.26 286.32 288.34 289.33 291.4 292.19 293.4 300.3 302.32 304.
34 307.39 308.19 318.4 326.4 335.44 414.5 416.5 418.52 430.5 444.5 446.5 457.33 45
8.75 460.5 466.53 473.44 476.47 564.7 576.85 592.6 3291.6 Shi Hu - 15197.18 ---

756.6

Shi Liu Pi - 246.26 248.27 254.4 256.42 270.37 274.27 278.43 280.44 282.46 284.4 8 286.4 290.27 302.23 306.27 312.53 316.48 318.23 321 323.34 324.98 327.42 328.4 3 29.4 330.24 336.4 337.37 338.4 339.4 341.4 344.27 350.4 352.4 353.37 354.31 355.43 358.38 360.4 362.42 366.5 367.4 368.3 369.5 385.45 399.4 402.65 412.69 414.71 418. 44 426.72 430.71 436.41 442.72 448.41 457 472.7 484.36 510.5 534.6 562.66 576.85 6 02.37 610.52 620.47 634.5 636.47 782.53 784.54 802.56 853.91 936.65 940.68 952.64 976.96 1085
Shi Liu Pi - 32885.82 --- 602.4

Shi Wei - 240.25 252.35 254.37 260.2 284.26 286.24 302.24 318.24 330.41 342.3 3 44.32 348.48 354.31 358.3 378.42 410.76 414.71 418.35 422.34 432.64 446.4 448.4 45 6.7 462.4 464.38 516.45 552.7 578.5 580.53 592.55 594.5 611 612.53 626.5 Shi Wei - 14297.03 --- 711.9

Shu Di Huang - 250.7 254.41 256.42 266.42 267.24 268.44 270.5 280.45 282.52 2 83.24 284.48 308.33 311.34 312.54 340.6 342.3 346.42 348.35 349.38 362.37 364.35 3 71.43 376.36 388.5 390.53 398.79 402.44 408.8 410.73 412.7 414.72 468.45 478 484.4 5 488.44 498.5 504.44 510.49 516.85 518.57 524.57 556 576.86 591 625 636.5 638.61 667 687 786.73 800.84 814.87 1701.21 Shu Di Huang - 24400.18 --- 447

Shui - 361.8 --- 361.8

Shui Zhi (Gardenia) - 210.18 238.2 242.22 328.4 358.6 374.34 388.37 404.4 420.4 5 456.7 550.51 614.9 976.96 1134.9 1468.52 Shui Zhi (Gardenia) - 8167.65 --- 406. 8

Shui Zhi (Leech) (hirudin var1 seq) - Shui Zhi (Leech) - 6970 --- 943.2

Song Xiang - 206.19 220.35 236.22 276.37 302.5 316.43 337.46 358.38 372.41 38 6.44 388.41 442.72 581.57 Song Xiang - 4219.26 --- 599.1

Su Mu - 248.36 258.23 268.26 270.28 272.25 282.46 284.5 286.28 288.29 296.53 3 00.31 302.32 304.29 306.22 316.26 318.32 330.29 348.35 378.46 392.44 410.8 417.5 4 20.5 422.47 426.72 454.43 484.4 570.54 575.7 585 586.54 600.6 840.7 Su Mu - 128 48.6 --- 639.6

Suan Zao Ren - 194.18 210.23 228.37 244.24 256.42 267.32 268.22 281.35 285.34 291.3 295.38 298.25 311.42 313.35 342.41 401.31 414.79 442.72 444.69 446.4 454.7 4 56.7 462.4 472.7 486.68 489.61 520.66 524.57 534.69 538.68 550.69 552.7 566.73 576. 85 580.75 595 609 624.77 631.8 684.94 754.69 767 768.78 785 800.83 814.7 816.75 1 045.21 1087.25 1207.35 1211.3 1221.38 1237.38 1243.34 1371.51
Suan Zao Ren - 32284.78 --- 591.3

Suo Yang - 204.07 212.24 228.37 254.4 256.42 270.5 280.44 282.46 284.5 290.27

302.23 312.53 338.57 352.39 414.71 422.81 442.37 456.7 498.74 520.52 522.54 578.5
2 Suo Yang - 7726.3--- 384.6

Tai Zi Shen - 191.18 218.7 242.23 243.22 244.2 246.35 267.24 268.23 271.35 278.
34 280.45 281.26 282.33 283.24 284.5 286.5 334.5 340.6 342.3 354.52 358.6 367.6 38
5.3 390.23 403.18 410.72 414.71 426.72 456.7 457.43 468.8 576.85 578.52 584.72 592.
5 594.5 611 636.6 648.9 692.7 716.11 747 807.32 868
Tai Zi Shen - 18735.95 --- 933

Tao Ren - 238.37 244.2 251.24 254.24 264.32 267.24 270.31 279.4 280.4 282.46 2
84.26 286.24 288.25 295.29 300.26 313.4 314.41 316.3 326.3 330.41 332.39 338.31 34
2.3 346.42 348.43 354.31 362.42 364 368.34 378.42 390.38 400.68 406.4 412.69 414.7
1 424.44 426.72 428.6 432 440.74 448.4 450.4 457.43 462.4 464.38 476 540.6 542.57
543 562.82 576.85 586.67 594.5 602.63 604.64 648.74 791 801.38 815.41 827.42 841.
29 Tao Ren - 26038.53 --- 477

Tian Dong - 204.1 228.37 252.31 256.42 266.29 282.33 302.24 314.38 342.34 344.
32 412.7 414.71 416.64 434.73 484.4 576.85 710.89 740.92 869 885 911 1031.18 1063.
23 1067.37
Tian Dong - 12811.72 --- 637.8

Tian Hu Sui- 163.15 302.23 316.26 354.35 412.7 464.38 626.52 943.1 957.1 1119.2
1209.3 1237.4 1251.4
Tian Hu Sui - 9357.09 --- 465.9

Tian Hua Fen - 280.44 282.33 284.5 286.24 292.46 294.47 296.53 300.26 306.5 30
8.5 310.6 312.53 362.42 412.7 414.71 432.38 454.68 457 516.67 536.9 558.7 560.9 56
8.57 574.83 576.95 586.94 610.52 635 1356.4
Tian Hua Fen - 13171.63 --- 655.8

Tian Ma - 192.12 200.23 212.2 230.26 244.28 245.27 253.21 256.42 258.31 267.24
283.24 286.28 300.31 318.23 342.3 368.38 372.5 377.39 392.4 414.71 432.46 457.43 5
52.6 576.85 586.94 610.65 612.5 624.77 679 996.91 Tian Ma - 11945.39 --- 594.9

Tian Men Dong - 252.31 266.29 268.31 282.33 296.32 302.23 412.7 414.71 416.6 4
45 490.7 576.85 578.8 740.92 868.48 869 885 905.1 911 1005.1 1009.2 1031.18 1051.
21 1213.35
Tian Men Dong - 15492.69 --- 771.3

Tian Nan Xing - 204.35 210.23 212.41 216.27 218.37 228.24 242.4 251.24 252.3 25
4.49 256.42 257.11 266.37 268.5 272.42 278.43 280.4 282.46 284.5 294.5 296.5 299.3
6 312.53 314.5 324.5 326.56 330.5 348.56 354.61 358.44 366.71 368.64 382.7 386.65
396.7 399.44 400.68 410.72 412.7 414.71 422.81 452.8 476.9 478 488.7 504.4 521 534.
86 550.68 562.57 564.49 576.85 580.54 667 692.7 767.1 770.73 990.86
Tian Nan Xing - 22840.11 --- 418.5

Ting Li Zi - 244.33 252.26 254.41 256.42 268.5 270.45 278.43 280.45 282.46 284.5 286.24 296.5 300.26 302.23 306.48 308.5 312.53 316.26 322.48 324.5 326.56 338.57 340.6 352.67 366.62 374.51 386.35 392.62 396.65 402.39 404.5 412.7 414.71 418.44 425.43 448.4 460.65 462.66 464.38 472.7 476.6 478.4 479 520.65 534.64 576.85 581.7 609.68 626.52 640.54 676.75 682.8 696.78 872.95 978.85
Ting Li Zi - 23243.01 --- 425.7

Tong Cao - 192.11 242.45 274.49 382.7 408.8 410.73 412.7 414.72 420.69 422.71 426.75 428.77 438.66 448.38 452.85 466.72 468.74 470.76 484.68 486.69 498.7 500.72 570 576.86 588.91 590.93 636.5 682.26 698.26 732 955.1 957.12 969.13 971.14 1701.21 Tong Cao - 19783.94 --- 984.9

Tou Gu Cao - 174.15 410.76 414.71 418.35 488.4 490.46 Tou Gu Cao - 2396.83 --- 881.7

Tu Bie Chong - 136.11 274.36 286.23 290.27 302.23 381.36 386.65 414.71 434.35 448.38 456.7 464.38 576.5 578.52 864.76 Tu Bie Chong - 6295.51 --- 852

Tu Fu Ling - 198.17 212.41 222.37 226.44 228.37 230.26 236.3 237.27 238.37 244.24 256.42 270.24 272.25 279.4 280.4 282.46 284.5 286.24 288.25 290.27 294.47 302.23 304.25 310.6 314.3 324.63 335.28 336.29 340.28 360.31 386.65 390.38 408.74 412.7 414.71 416.6 426.72 434.39 448.38 450.82 456.7 464.46 472.7 492.43 514.78 534.64 576.85 610.52 644.73 692.7 820.74 869 924.85 954.96 966.97 969 996.91 1081.2 1197.3 1701.2 Tu Fu Ling - 28420 --- 520.5

Tu Si Zi - 254.24 264.36 268.26 270.24 280.44 282.46 286.24 302.24 316.26 354.35 358.4 370.35 376.36 386.65 395.7 400.68 412.7 414.71 426.72 432.4 448.38 463.4 464.4 516.45 536.87 534.47 576.85 580.5 610.52 618.75 626.52 664.61 784.5 2158.65 2781.3 Tu Si Zi - 19219.93 --- 957

Wa Song - 206.24 278.43 280.45 286.25 296.53 302.25 308.5 358.3 414.79 428.82 432.41 434.38 457 464.41 480.96 576.95 1356.4 Wa Song - 7363.07 --- 996.6

Wang Bu Liu Xing - 244.2 246.3 278.43 280.45 282.46 284.5 288.25 290.27 302.24 312.53 318.3 332.26 334.5 368.64 412.7 418.35 427.4 432.51 450.39 454.6 484.62 520.5 542.62 576.85 594.52 596.49 609.72 646.81 710.63 719.83 726.63 888.4 904.82 1151.24 1177.28 1421.52 1449.53 1463.6 1465.53 1479.56 1521.64 1527.6 Wang Bu Liu Xing - 27939.22 --- 511.8

Wei Ling Xian - 206.32 212.41 222.37 226.44 228.37 232.32 240.5 242.4 254.49 260.33 268.5 270.5 278.34 279.4 280.44 282.55 284.5 294.47 302.23 310.6 324.98 338.44 358.4 360.4 362.5 402.49 410.72 412.7 414.71 426.72 457 460.47 464.38 472.7 534 545.58 550 570.47 576.85 604.81 606.6 634.84 720.93 751.1 867.1 883.1 927.1 1029.21 1045.21 1128.21 1161.49 1191.35 1193.32 1207.35 1337.49 1499.63 1515.63 1794.12 1807.91 1956 1970 Wei Ling Xian - 39453.49 --- 722.7

Wu Bei Zi - 170.12 184.15 204.36 318.24 320.25 322.22 400.47 416.51 432.51 454.69 470.69 514.57 536.58
Wu Bei Zi - 4745.36 --- 642.3

Wu Hua Guo - 261.27 264.4 268.5 270.45 278.34 280.44 282.5 284.5 286.37 294.47 312.53 314.29 324.4 325.36 328.27 330.29 338.65 342.6 348.5 369.41 380.73 424.7 426.72 468.75 501.7
Wu Hua Guo - 8308.14 --- 413.7

Wu Jia Pi - 152.15 278.43 284.5 302.5 308.5 354.35 372.4 384.3 414.71 546.6 550.64 576.85 726.63 742.72 891.5 1480.6 Wu Jia Pi - 8367.38 --- 416.7

Wu Ling Zhi - 192.17 204.35 217.65 220.35 316.26 330.42 346.4 352.5 380.73 416.7 446.7 448.63 456.7 472.7 488.7 576.85 619 1221.38 Wu Ling Zhi - 7708.19 --- 383.7

Wu Mei - 192.21 194.23 199.31 200.32 222.37 226.44 228.37 229.1 234.2 240.5 254.49 256.42 270.45 272.25 279.4 280.45 282.55 284.5 286.24 290.27 292.46 294.47 295.29 300.26 302.23 310.6 316.26 318.49 326.3 334.5 351.44 354.31 360.31 372.37 386.65 400.68 412.7 414.71 432.4 446.4 448.38 456.7 457.43 462.4 464.38 548.62 580.53 610.56 742.7 Wu Mei - 16718.6 --- 832.5

Wu Wei Zi - 204.39 208.34 215.37 216.36 218.38 220.35 222.41 223.31 232.32 234.33 236.39 258.27 266.46 272.29 278.34 280.32 302.4 304.47 312.53 318.4 320.25 328.54 330.5 346.36 348.43 354.3 368.52 374.43 384.42 386.65 388.45 390.5 400.5 402.65 414.67 416.68 418.5 424.61 430.71 432.64 442.72 444.57 450.7 451.58 452.67 458.72 462.4 464.64 466.65 472.7 480.63 498.6 500.6 514.6 515.6 520.6 522.6 530.61 536.6 538.6 550.47 552.61 610.52 666.6 1085.43 Wu Wei Zi - 25879.76 --- 474

Wu Yao - 272.34 275.26 276.4 278.39 280.45 282.46 284.5 290.48 296.32 298.55 302.24 304.34 310.3 312.32 313.35 318.32 324.4 327.4 329.39 340.37 386.65 388.4 414.71 478.4 576.85 610.52
Wu Yao - 8873.11 --- 441.9

Wu Zhu Yu - 259.26 264.4 270.4 271.31 272.5 275.3 279.29 281.48 283.49 284.5 285.42 287.32 289.33 290.48 292.33 293.4 299.33 301.34 302.24 303.4 304.29 305.41 307.39 311.5 313.5 316.5 317.34 318.24 319.39 320.51 327.5 336.4 337.5 339.51 341.53 347.4 353.54 354.31 359.83 365.6 367.63 369.6 408.8 414.71 428.7 452.8 454.51 456.7 468.5 470.51 472.53 484.5 486.51 500.5 502.51 528.6 542.68 576.85 594.7 607.78 610.52 650.54 716.9 Wu Zhu Yu - 23851.29 --- 436.8

Xi Jiao - 196.39 198.39 201.22 222.37 228.41 241.39 242.44 256.47 279.4 282.46 284.5 294.47 306.48 308.5 386.65 550.68 1064.19 Xi Jiao - 5544.41 --- 750.3

Xi Xian Cao - 204.35 210.4 222.32 280.36 296.44 312.57 318.45 322.48 326.56 330.5 334.55 335.4 336.46 338.48 348.58 360.44 378.54 380.52 404.41 406.43 410.7 412.7

414.71 415.65 448.59 472.7 482.61 485 488.7 498.61 500.62 526.66 574.83 576.85
Xi Xian Cao - 13157.17 --- 655.2

Xi Xin - 252.48 254.28 256.42 266.3 271.31 272.25 280.5 284.5 286.24 288.38 316.43 326.39 330.33 341.27 346.33 354.4 356.4 357.27 358.4 360.44 368.38 369.41 442.72 446.9 448.38 470.8 490.7 538.77 568.7 594.52 610.5 1085.43 Xi Xin - 12595.53 --- 627

Xi Yang Shen - 214.3 218.38 220.35 226.44 228.11 232.4 244.37 246.43 252.48 258.35 260.46 269.25 270.45 276.4 278.39 280.45 284.5 286.5 292.46 302.4 305.41 306.44 316.26 339.39 342.3 354.31 374.34 386.4 388.41 390.23 410.72 444.73 457 460.82 470.7 478 495.6 504.4 512.46 538.5 552.61 576.85 586.94 623 638.87 654.87 718.6 771 785 801 819 879.38 880.3 927.1 931.15 946.55 947.15 955.49 957.11 1033.2 1065 1075.39 1078.59 1079.3 1108.6 1109.3 1150.61 1151.33 1165.3 1193.59 1195.34 1271.4 1365.9
Xi Yang Shen - 44413.21 --- 813.6

Xian He Cao - 282.25 286.24 290.27 298.38 302.24 304.25 314.36 380.73 408.8 414.71 432.4 434.3 440.79 448.4 452.4 456.7 460.5 462.4 463.4 464.4 473.22 474.5 476.5 478.92 484.4 504.78 550.68 610.52 626.6 634.45 640.7 654.7 668.73 682.75 1871.35
Xian He Cao - 17630.72 --- 877.8

Xia Ku Cao - 276.29 280.4 282.46 284.5 286.24 287.24 296.53 301.27 302.24 303.24 331.3 340.6 354.31 360.31 368.64 386.65 410.67 412.7 414.71 424.7 426.72 440.7 442.72 446.4 448.4 450.7 452.8 457 463.4 464.38 470.73 472.7 484.71 486.73 488.7 500.71 502.72 507 568.65 574.83 576.85 610.5 618.8 625.6 650.84 666.94 691 721 812.98 Xia Ku Cao - 22230.21 --- 407.1

Xian Mao - 282.46 284.5 286.28 287.31 316.3 320.32 332.3 354.31 412.7 414.71 418.44 426.7 430.62 448.42 452.41 456.83 458.8 466.44 466.44 474.8 476.82 478 482.48 490.7 496.5 501.35 509 521 531.34 534.94 535.75 576.85 606.8 636.9 742.8 757 769 783.12 785 799 801 915.25 931.1 945.28 961.1 963.2 1077.41 1093.25 1125.29 Xian Mao - 28618.32 --- 524.1

Xiang Cha Cai - 316.26 318.4 320.5 330.29 334.45 348.4 352.29 360.49 364.43 374.5 376.5 388.5 390.5 392.5 404.5 412.7 434.5 450.5 456.7 468.5 470.7 472.7 488.7 536.7 576.85
Xiang Cha Cai - 10141.06 --- 504.9

Xiang Fu - 230.22 232.32 234.37 236.35 238.41 246.22 252.35 260.24 262.39 268.26 276.4 286.24 287.24 296.53 300.26 302.24 303.24 306.27 316.53 330.29 354.35 355.43 358.3 390.38 408.4 412.7 414.71 426.72 434.39 448.4 452.7 457 464.4 470.7 486.73 574.83 576.85 602.94 608.54 610.52 765.1 824.86
Xiang Fu - 16365.32 --- 814.8

Xiang Jia Pi - 252.31 254.41 255.27 256.42 270.24 278.43 280.45 282.46 284.5 286.

45 296.53 302.45 304.25 312.53 314.37 316.43 318.55 322.48 326.43 334.55 340.6 34 8.4 350.4 358.38 360.53 362.56 366.4 368.5 372.5 376.49 378.56 380.58 382.4 390.57 392.49 397.93 414.71 426.72 444.52 457 464.71 468.75 470.51 472.7 474.7 478 487.3 3 494.7 500.45 510.57 512.59 528.59 534.68 536.73 538.46 540.47 546.92 562.65 576. 85 580.54 604.77 608.67 610.52 636.91 648.82 650.7 696.82 724.79 766.82 777.1 803. 1 921.12 1065.29 1123.3 1137.26 1149.48 1165.31 1201.43 1229.49 1257 1271.52 128 5.55 1341.57 1356 1369.62 1411.7 Xiang Jia Pi - 49615.31 --- 908.7

Xiang Mao - 286.24 292.29 354.31 382.72 410.8 426.73 432.65 438.82 448.38 458. 73 466.9 580.53 594.52
Xiang Mao - 5573.62--- 754.5

Xiang Ru - 254.49 267.24 268.5 270.24 278.43 280.45 282.55 284.5 286.28 290.27 296.57 298.5 300.26 302.24 310.6 312.53 314.29 324.63 332.3 338.65 380.73 386.44 4 14.71 446.7 448.96 456.7 464.41 478.9 538.46 576.85 677 Xiang Ru - 11163.38 --- 555.9

Xiao Hui Xiang - 242.4 256.42 270.28 280.45 282.5 312.53 326.56 340.6 400.68 41 2.7 414.71 426.72 457 576.85 Xiao Hui Xiang - 5000.4 --- 676.8

Xiao Ji - 267.24 270.24 272.25 284.26 286.24 300.26 302.24 330.3 354.31 358.3 4 12.7 414.72 424.7 426.72 438.82 458.73 462.4 464.38 468.8 482.7 592.55 610.56 622. 58 Xiao Ji - 9306 --- 463.5

Xiao Mai - 234.16 250.33 342.4 414.71 416.7 427.4 430.7 448.38 450.39 594.52 69 2.7
Xiao Mai - 4702.39 --- 636.3

Xie Bai - 180.35 182.37 185.1 200.32 216.26 228.37 230.26 240.38 242.4 254.41 2 56.25 258.27 262.26 267.24 272.25 280.4 282.46 284.5 302.28 335.5 336.47 337.5 364. 3 368.64 372.4 392.4 394.42 398.74 400.71 408.4 416.71 430.62 432.64 478.9 488.7 5 02.7 574.83 576.85 580.59 610.62 622.75 903.1 918.48 919.1 935.1 937.1 951.1 1035. 32 1065.2 1107.24 1227.34 1243.34 Xie Bai - 25693.94 --- 470.7

Xin Yi - 192.21 196.29 198.3 200.32 204.39 212.41 220.35 222.37 226.44 228.37 2 40.5 242.27 247.38 264.4 266.33 268.5 278.34 282.55 286.36 300.26 301.27 305.3 308. 5 318.41 324.37 340.41 342.34 354.4 356.45 358.4 360.4 370.4 372.45 386.48 400.46 416.5 432.64 446.5 470.8 Xin Yi - 11744.82 --- 584.7

Xing Ren - 240.47 254.5 256.43 264.32 268.53 270.46 272.43 278.44 280.45 282.5 6 284.48 285.34 286.28 290.27 292.29 294.48 295.29 296.58 297.35 298.51 308.51 31 0.61 312.54 316.31 324.64 327.38 336.34 338.66 340.59 342.52 346.38 348.35 352.69 358.39 362.33 366.72 372.42 380.74 386.66 388.37 394.77 408.8 410.73 412.7 414.72 418.4 422.83 432.38 436.85 448.38 450.88 456.71 457.43 458.73 464.91 478.93 482.4 4 492.96 522.5 534.56 564.54 576.86 578.52 592.55 594.52 602.46 624.59 738.69 742. 82 786.73 822.94 885.45 952.65 1105.32 Xing Ren - 31679.86 --- 580.2

Xiong Huang - 75 136.23 213.98 252.1 Xiong Huang - 677.31 --- 678

Xu Chang Qing - 196.2 240.5 242.4 256.43 268.53 278.35 280.45 282.47 284.5 360.49 363.4 364.5 368.51 376.49 380.48 382.5 390.47 402.4 414.71 424.75 460.8 520.62 778.93 794.93 808.91
Xu Chang Qing - 9726.52 --- 484.2

Xu Duan - 196.2 207.23 214.3 258.23 295.33 358.34 378.51 382.7 390.4 404 414.71 444.72 456.7 472.7 480.85 516.49 576.85 584.57 604.81 696.83 746.71 750.96 767.1 929.1 967.14 1221.38 1237.38 1399.52
Xu Duan - 16353.76 --- 814.2

Xuan Fu Hua - 180.16 208.21 224.3 227.28 248.32 266.33 268.3 280.36 286.24 300.26 302.24 304.25 306.4 308.37 316.43 326.3 328.49 330.31 332.26 346.29 348.48 350.45 354.31 360.31 364.39 366.45 390.32 414.71 418.35 426.72 428.73 432.64 448.41 464.4 467.6 468.75 478.4 480.37 494.4 516.45 524.57 576.85 586.72 644.73 665.1 891.5 919.1 937.1 951.1 969 1128.21 1801.6 Xuan Fu Hua - 24761.32 --- 453.6

Xuan Shen - 254.41 256.25 267.24 278.43 279.4 282.46 286.28 300.44 306.4 329.35 332.38 342.3 346.33 348.35 352.34 362.33 364.34 366.4 376.36 382.4 388.37 414.71 426.7 432.42 454.7 456.7 462.4 480.46 492.57 494.49 510.49 536.52 540.51 560.6 576.85 590.63 625 652.64 656.63 722.69 752.71 784.75 840.82
Xuan Shen - 19268.55 --- 959.4

Xue Jie - 252.26 256.3 266.29 270.32 284.31 300.44 302.5 316 438.7 440.7 457 474.5 488.53 538.59 794.88 Xue Jie - 5881.32 --- 795.9

Ya Ma Zi - 280.45 282.5 284.5 286.41 288.42 289.37 290.49 296.53 298.55 302.46 314.46 330.46 331.46 358.38 360.4 362.46 380.35 386.66 400.69 409.39 412.7 414.72 426.73 430.72 440.76 448.38 474.73 576.86 594.52 660.73 686.7 1068.4 1082.4 1084.4 1098.4 Ya Ma Zi - 16435.54 --- 818.4

Ya Dan Zi - 266.25 270.24 279.4 280.45 282.46 284.5 286.24 290.27 300.26 307.1 308.29 322.22 344.3 358.38 360.4 386.4 394.46 396.43 410.62 412.43 426.4 428.7 438.43 442 448.41 452 454.68 458.7 463.4 464.38 468.7 470.7 474.7 478 480.46 484.45 518.56 520.52 521 522.5 524.6 542.5 549 564.6 567 574.57 576.85 586.94 596.9 604.6 607 621 624.77 643 645 671 680.6 683 685 687 697 701 704.67 711 727 741 768.76 771 782.78 891.5 Ya Dan Zi - 35688.43 --- 653.7

Yan Hu Suo - 222.24 230.3 246.26 267.24 270.24 275.26 278.34 280.45 282.46 284.26 286.4 302.24 320.3 321 323.34 325.4 327.42 328.4 329.4 332.3 333.34 336.4 337.37 338.4 339.4 340.6 341.4 349.38 350.4 351.43 352.44 353.41 354.46 355.43 365.38 366.5 367.4 368.3 369.5 371.43 381.42 385.45 391.37 397.42 399.44 409.43 412.7 414.71 424.8 430.45 510.5 534.6 562.66 576.85 597.57 599.6 720.72
Yan Hu Suo - 21025.31 --- 385.2

Ye Ju Hua - 252.35 254.37 256.42 264.32 268.35 270.24 278.43 284.26 286.24 287.24 296.53 300.26 302.23 304.34 306.35 316.26 324.4 328.36 330.41 342.3 344.32 346.42 354.31 358.34 364.4 378.42 410.8 418.44 426.72 432.4 446.4 448.4 449.38 456.7 462.4 464.38 516.45 552.7 576.85 584.87 592.54 610.69 626.52 742.72 Ye Ju Hua - 17219.23 --- 857.4

Yi Mu Cao - 232.28 244.33 246.3 270.24 278.4 284.5 286.5 296.5 300.43 302.25 304.5 308.5 311.33 314.4 316.43 318.45 352.5 330.42 332.43 334.45 336.5 348.35 352.46 376.49 390.43 392.5 394.5 404.45 408.53 412.69 450.52 463.4 464.38 550.68 594.56 611 625 667 Yi Mu Cao - 14208.58 --- 707.4

Yi Tang - 176.12 342.3 376.36 1356.4 Yi Tang - 2251.18 --- 828.3

Yi Yi Ren - 165.15 174.2 200.59 207 216.32 228.37 254.41 256.42 278.43 280.45 282.5 284.5 288.42 294.47 296.5 308.5 331.34 354.52 356.54 371.4 386.65 396.65 400.68 410.72 412.7 414.71 426.72 578.96 590.96 592.99 879.38 885.43 Yi Yi Ren - 10 614.95 --- 588

Yi Zhi - 208.25 210.27 218.33 220.35 222.37 234.33 238.37 254.41 256.42 268.26 278.43 280.44 282.46 284.26 300.26 302.45 310.39 312.4 314.46 368.64 412.7 414.71 576.85 653.12 668.7
Yi Zhi - 8091.63 --- 402.9

Yin Chen - 220.35 228.37 240.34 242.36 260.29 278.43 280.44 282.46 284.48 286.24 300.39 302.28 311.33 314.29 316.4 330.29 344.32 346.3 348.34 354.31 360.31 414.71 463.4 464.38 478.4 610.52
Yin Chen - 8663.73 --- 431.4

Yin Yang Huo - 190.28 192.3 200.32 204.35 222.37 234.37 238.51 254.41 256.42 262.3 266.33 270.24 278.43 284.5 286.24 290.38 298.29 300.3 302.24 308.5 320.37 329.43 330.3 336.34 338.35 340.6 342.41 352.4 354.35 368.38 370.41 376.4 386.43 400.68 406.51 414.71 416.46 418.52 420.5 422.5 424.8 433.47 436.84 438.47 448.4 452.8 457 462.49 463.4 464.4 500.49 514.52 516.5 518.56 530.52 552.48 562.6 566.51 576.85 578.52 586.94 591 631 632.61 662.7 677 678.7 718.7 732.72 749 760.7 794.7 809 821 822.89 825 838.8 891.5 922.9 936.9 965 1107.49 Yin Yang Huo - 39643 --- 726

Yu Jin - 266.41 268.39 272.5 278.34 280.4 282.5 284.5 286.46 288.42 292.41 296.34 298.4 300.26 302.23 308.45 310.3 316.26 326.3 330.5 338.35 342.42 344.32 346.3 352.4 354.38 360.31 362.37 368.4 370.43 376.44 382.28 384.4 386.43 398.44 413.64 442.6 444.61 463.4 478.4 502.55 534.5 576.85 594.7
Yu Jin - 15508.29 --- 772.2

Yu Xing Cao - 198.3 200.32 204.35 220.35 222.37 224.3 226.35 228.37 240.42 256.42 265.26 270.24 279.29 280.45 284.48 285.4 286.24 290.27 296.31 302.23 307.3 321.33 342.4 348.48 354.31 358.3 359.59 372.37 387.6 398.66 414.71 432.64 442.72 448.4

463.4 464.4 492.95 538.63 550.68 578.52 586.94 600.52 610.52 626.52 648.9 716.81 7
32.9 822.9 Yu Xing Cao - 18785.12 --- 935.4

Yu Zhu - 242.4 254.41 256.42 280.44 282.46 300.33 313.35 314.36 328.39 330.36
385.5 412.67 414.69 418.44 430.69 434.73 580.75 608.76 610.56 677 743 917.17 933.
1 949.1 1033.3 1049.3 1061.31 1063.33 1079.33 1193.44 1211.34 1243.34 1257.36
Yu Zhu - 21611.13 --- 396

Yuan Zhi - 256.42 258.23 264.28 265.26 272.25 275.34 280.44 282.46 284.48 288.
25 302.28 306.4 307.3 318.28 332.3 338.35 342.3 346.33 384.38 388.37 406.34 410.72
416.42 436.37 444.4 448.4 463.4 464.4 492.6 494.44 518.5 548.5 552.52 558.9 568.5 5
70.5 576.85 582.51 586.93 596.53 610.5 612.53 669 680.82 683 743 752.71 768.71 12
67.15 1297.17 1309.18 1327.2 1339.21 1351.22 1369.24 1381.25 1411.27 1455.32 145
7.74 1487.58 1497.36 1527.39 1573.67 1589.67 1705.79 Yuan Zhi - 46099.11 ---
844.5

Zao Fan - 178.18 278 Zao Fan - 456.18 --- 456

Zao Jiao Ci - 256.42 270.24 272.29 274.27 282.46 284.5 286.24 287.24 288.25 290.
27 302.24 304.25 320.25 326.3 332.3 339.34 358.3 368.3 374.38 396.43 404.41 408.8
412.7 414.71 426.7 434.39 440.53 454.68 456.7 460.39 470.7 473 498.74 500.56 512.5
1 544.5 558.53 574.53 576.85 586.54 596.62 610.52 624.5 626.52 640.54 1621.8 1701.
2 1784.97 1791.92 1799.94 1817.95 1922.1 1924 1926 1944.1 1950.15 2006.13 2020.1
6 2070.17 3275.59 3305.62 3571.95 Zao Jiao Ci - 55357.19 --- 372.9

Zao Xiu - 256.42 300.26 320.5 414.62 480.63 576.8 653.15 698.79 722.9 724.87 76
8.88 855 869 871 991.12 1015.2 1031.18 1049.2 1077.3 Zao Xiu - 13676.82 --- 6
81

Ze Lan - 234.29 270.5 278.34 282.33 284.5 292.5 294.5 299.36 318.36 326.6 332.5
348.39 352.7 358.3 360.57 408.79 412.69 414.71 432.4 434.65 448.4 457 472.7 479.84
480.85 488.78 498.7 504.44 534.86 576.85 650.84 666.58 990.86 Ze Lan - 13987.6
8 --- 696.6

Ze Xie - 180.1 182.17 204.1 208.21 220.39 236.39 238.37 254.41 270.24 272.43 2
84.5 300.41 302.43 304.47 318.48 326.6 330.5 342.3 354.52 414.71 420.32 436.58 456.
7 468.67 470.68 472.7 474.71 484.67 486.68 488.7 490.71 504.44 506.71 512.72 514.7
4 516.7 518.77 520.7 528.85 530.74 532.84 544.76 546.73 548.75 667 828.72 Ze Xi
e - 19020.02 --- 947.1

Zhang Nao --- 204.35 220.35 222.37 313.35 329.39 354.35 408.8 412.7 578.52 592.
72 866.77
Zhang Nao - 4503.67 --- 609.6

Zhe Bei Mu - 271.24 274.44 280.27 288.47 292.13 296.44 302.45 304.47 306.48 31
6.48 320.51 397.64 411.62 413.64 414.71 422.42 427.62 429.7 431.73 445.63 447.65 4

50.57 577.8 593.79 623.8 631 705.92 737.96 742.72 868 Zhe Bei Mu - 13427.3 --- 668.7

Zhen Zhu - 24.31 26.98 28.1 54.94 55.84 63.55 65.4 87.6 100.1 Zhen Zhu - 50 6.82 --- 507

Zhi Ke - 204.35 216.19 220.35 222.37 224.21 225.28 228.24 238.24 244.24 246.3 2 55.31 256.42 260.29 264.32 270.28 272.26 286.24 288.25 295.29 297.35 298.38 300.2 6 302.28 322.22 332.4 346.4 354.4 372.37 388.37 397.5 402.4 414.72 432.38 457.43 4 70.52 472.53 480.9 494 496.46 536.87 568.87 581 594.5 596.53 608.54 611 617 970.1 1701.2 Zhi Ke - 19937.31 --- 992.7

Zhi Ma Qian Zi - 266.33 292.28 314.4 326.3 334.41 354.3 390.38 394.46 414.71 Zhi Ma Qian Zi - 3087.57 --- 417.9

Zhi Qiao - 167.2 216.19 222.37 225.28 228.24 264.32 272.25 295.29 302.28 342.34 354.4 372.37 402.39 434.39 457.43 480.46 494 496.46 568.87 578.5 580.53 594.5 596. 53 611 Zhi Qiao - 9557.59 --- 475.8

Zhi Mu - 238.24 240.25 246.21 248.32 252.31 254.24 256.25 258.31 260.2 266.3 2 67.32 268.26 270.24 276.33 283.32 284.5 286.28 298.29 313.35 315.32 342.3 346.5 36 0.32 368.38 386.65 400.7 402.5 408.7 412.7 414.71 416.71 418.68 420.58 422.4 430.6 9 432.71 434.73 444.52 448.76 456.7 469.63 478.5 514.52 530.5 552.5 566.51 578.8 5 84.48 740.92 743 756.92 758.94 773.1 887.1 901.22 903.1 919.2 921.1 935.1 1035.2 1 049.2 1051.2 1215.33 1229.31 1231.33 1697.33 Zhi Mu - 35577.82 --- 651.6

Zhi Shi - 222.37 224.21 225.28 228.24 238.24 241.28 244.33 246.22 255.31 256.4 2 260.3 262.28 264.32 270.28 272.26 280.45 286.28 288.25 297.35 298.4 300.26 302.3 304.29 312.37 314.38 322.22 326.34 328.4 329.4 330.38 332.39 342.34 358.39 372.4 3 76.44 388.4 400.68 402.4 414.71 432.38 455 462.45 470.51 472.53 488.53 494 514.56 520.58 532.6 536.87 539 568.57 578.52 581 594.56 596.53 608.55 611 624.6 686.7 71 2.74 742.7 1701.2 Zhi Shi - 26246.24 --- 480.9

Zhi Zi - 204.35 206.19 207 208.98 210.18 212.41 218.33 219.28 222.37 224.25 226. 31 228.37 230.24 236.35 242.22 244.27 245.27 254.41 256.42 268.5 270.28 278.34 28 0.4 282.46 284.5 286.24 290.27 294.47 296.5 300.3 301.5 302.23 306.27 308.5 310.51 314.29 316.48 324.5 328.4 330.37 332.3 340.28 344.31 346.37 352.39 354.31 356.5 35 8.6 360.31 372.4 374.34 382.36 388.4 390.34 392.4 404.4 406.38 408.79 410.72 412.7 414.71 418.4 423.5 426.72 430.4 432.64 436.8 440.79 442.37 446.4 448.38 457 458.37 464.38 478 486.68 516.45 545 550.51 560.5 568.87 574.53 576.85 578.52 604.81 610. 52 614.9 618.8 660.58 696.65 740.66 742.72 814.82 824.73 973.1 976.96 Zhi Zi - 3 8517.13 --- 705.6

Zhu Ling - 138.12 180.16 182.17 192.21 196.2 204.36 244.31 267.33 335.29 384.64 392.63 397 398.7 429 430.67 432.76 458.68 460.72 462.67 477 479 492.72 494.74 581. 7 791 Zhu Ling - 9503.78 --- 473.1

Zhu Ru - 122.12 178.18 182.17 Zhu Ru - 482.47 --- 482.4

Zhu Sha - 232.66 --- 232.8

Zi Cao - 270.49 272.29 274.31 276.37 278.34 280.4 282.46 286.45 288.3 298.55 29
9.36 302.36 308.5 310.51 316.35 326.6 330.33 339.47 340.58 344.4 348.3 354.7 356.4
1 358.43 360.4 368.64 370.4 372.41 380.65 381.5 388.45 396.69 397.5 398.45 408.49
410.72 430.45 432.63 457 460.69 464.41 488.74 516.8 538.46 716.6 717.6 718.61 954.
66 Zi Cao - 18975.21 --- 944.7

Zi Hua Di Ding - 220.36 228.38 256.43 268.53 270.46 278.35 280.45 282.56 284.5
294.5 296.58 310.61 330.55 340.28 395.7 414.71 431.37 432.4 487.8 534.47 546.52 56
4.49 580.5 610.52
Zi Hua Di Ding - 8941.02 --- 445.2

Zi Ran Tong - 63.55 Zi Ran Tong - 63.55 --- 172.8

Zi Su Geng - 196.29 204.35 210.27 222.37 278.43 282.46 284.5 296.53 306.48 308.
5 342.51 347.53 396.65 536.87 Zi Su Geng - 4213.74 --- 570.3

Zi Su Ye - 208.25 220.35 222.37 278.43 282.46 284.5 295.29 296.53 306.48 314.37
321.37 328.36 347.53 354.35 360.31 396.65 400.68 412.69 414.71 462.36 488.5 536.8
7 594.52 638.48 696.82 757.67 843.71
Zi Su Ye - 11064.61 --- 550.8

Zi Su Zi - 268.49 270.45 273.37 278.43 280.45 282.55 284.5 286.24 296.5 298.5 30
4.5 306.54 310.51 312.53 314.25 322.61 326.56 342.6 385.3 386.65 400.68 412.7 414.
71 427 428.73 440.74 478 536.87 880.3
Zi Su Zi - 10551.26 --- 525.3

Zi Wan - 260.33 262.26 270.24 278.38 280.44 282.46 284.26 286.24 290.5 294.47
302.23 316.26 324.98 332.44 334.5 336.52 338.44 344.34 354.31 360.31 374.37 402.4
9 406.38 412.7 414.71 426.72 428.73 432.38 436.7 448.57 457 462.53 464.57 473 478.
74 480.85 488.78 498.68 502.76 516.45 520.78 531.56 534 545.58 550 558.9 570.47 5
74.83 576.85 586.46 611 1128.21 1193.32 1251.53 1309.4 1325.4 1383.66 1441.6 145
7.6 1587.9 1603.7 Zi Wan - 34983.77 --- 640.8

Zong Lv - 228.37 256.42 284.5 290.27 1209.37 Zong Lv - 2268.93 --- 834.6

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Frequency List of TCM Herbs

142.2, 159.6, 159.6, 163.2, 172.8, 186, 186.9, 232.8, 239.5, 242.7, 258.2, 259.8, 306.6, 313.8, 361.2, 361.8, 368.7, 369.6, 370.2, 371.4, 372.3, 372.9, 374.7, 375.9, 376.8, 377.4, 378.3, 380.1, 380.7, 381.6, 383.1, 383.7, 384.6, 385.2, 386.4, 388.5, 389.1, 390.9, 391.8, 392.4, 393.3, 393.9, 394.8, 396, 396.6, 397.8, 398.7, 399.9, 401.1, 402.9, 403.5, 404.4, 405.6, 406.2, 406.8, 407.1, 407.7, 408.9, 409.5, 411, 411.6, 413.7, 416.7, 417.9, 418.5, 420.3, 421.8, 422.4. 423.9, 425.1, 425.7, 428.1, 429, 431.4, 432, 432.6, 433.8, 434.1, 435.3, 435.9, 436.8, 437.4, 438.3, 438.9, 439.8, 440.7, 441.3, 441.9, 443.4, 445.2, 447, 448.2, 449.1, 450.9, 451.8, 452.7, 453.6, 454.8, 456, 458.4, 459.3, 460.2, 461.4, 462.3, 463.5, 465.9, 466.8, 468.3, 469.8, 470.7, 471.6, 472.2, 473.1, 474, 475.8, 477, 477.6, 478.8, 479.4, 480.9, 482.4, 483.6, 484.2, 484.8, 485.7, 486.6, 487.2, 488.4, 489.9, 490.2, 491.4, 492, 492.6, 494.1, 496.2, 499.2, 500.7, 501.3, 503.1, 503.7, 504.9, 505.5, 507, 508.8, 510, 510.9, 511.8, 512.5, 513.9, 514.8, 517.8, 518.7, 520.5, 521.1, 524.1, 525.3, 526.8, 527.7, 529.5, 530.4, 533.4, 537, 538.5, 539.1, 539.7, 540.6, 541.8, 543.6, 546.3, 548.7, 549.3, 550.8, 553.5, 555.9, 557.1, 559.8, 560.4, 562.2, 563.4, 565.8, 566.4, 569.1, 570.3, 571.8, 573.3, 577.2, 579.3, 580.2, 582.3, 584.7, 588, 589.8, 591.3, 592.5, 594.9, 597.9, 599.1, 602.4, 604.2, 606.9, 607.5, 608.4, 609.6, 612.9, 613.8, 614.4, 616.8, 621, 624, 624.6, 627, 627.6, 631.5, 632.4, 636.3, 637.8, 638.7, 639.6, 640.8, 642.3, 642.9, 647.1, 648, 648.9, 651.6, 652.2, 653.7, 655.2, 655.8, 656.4, 659.7, 661.2, 662.4, 665.4, 666, 668.7, 669.9, 670.8, 672.9, 674.7, 676.8, 677.7, 678, 681, 686.4, 693.6, 693.6, 694.5, 696.6, 702.3, 705.6, 707.4, 708.9, 711.9, 713.7, 715.5, 720.3, 721.2, 722.7, 725.1, 726, 730.8, 732.3, 733.5, 734.1, 742.2, 742.8, 745.5, 746.1, 747, 750.3, 752.7, 754.5, 756.6, 757.8, 759, 762.6, 765.3, 767.4, 769.2, 770, 771.3, 772.2, 773.1, 776.7, 777.6, 779.1, 780.6, 784.8, 786.3, 787.5, 788.7, 790.5, 791.7, 793.2, 795.9, 797.1, 798.9, 809.7, 813.6, 814.2, 814.8, 818.4, 819.3, 821.1, 822.9, 823.5, 828.3, 828.9, 829.5, 832.5, 834.6, 835.2, 835.8, 838.2, 839.1, 839.7, 840.3, 844.5, 849.6, 852, 854.1, 857.4, 858.6, 859.2, 861.3, 867.6, 868.8, 871.5, 872.1, 874.2, 876, 877.8, 878.4, 879.3, 881.7, 884.4, 886.2, 888.6, 897.3, 899.4, 900, 903.3, 906, 906.6, 907.2, 908.7, 909.9, 911.4, 912.3, 913.8, 915.6, 916.2, 916.8, 919.2, 920.1, 924.3, 926.1, 927.3, 928.2, 932.4, 933, 935.4, 936.6, 937.2, 942.6, 943.2, 944.7, 947.1, 951.3, 952.5, 955.5, 957, 959.4, 961.8, 963.9, 969, 970.2, 971.1, 972.4, 975, 977.7, 978.9, 979.8, 984.9, 987.9, 992.7, 996.6

Molecular Weight Data Sources,

-HERB (Beijing University of Chinese Medicine) - http://herb.ac.cn/

-TCMBANK (Sun Yat-sen University) - https://tcmbank.cn/Herbs

-TCM-ID (Traditional Chinese Medicine Information Database) - https://bidd.group/TCMID/search.php

-TCMSID (Traditional Chinese Medicine Simplified Integrated Database)
 - https://tcm.scbdd.com/home/search_index/

-ETCM (Encyclopedia of Traditional Chinese Medicine)
 - http://www.tcmip.cn/ETCM/index.php/Home/Index/Prescriptions_All.html?getType=yc